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Current Notes

Vol. 9 No. 7 September 1989

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☞ **Air Warrior** – **Exciting, expensive, nationwide WWII battle**

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CN 907

September, 1989

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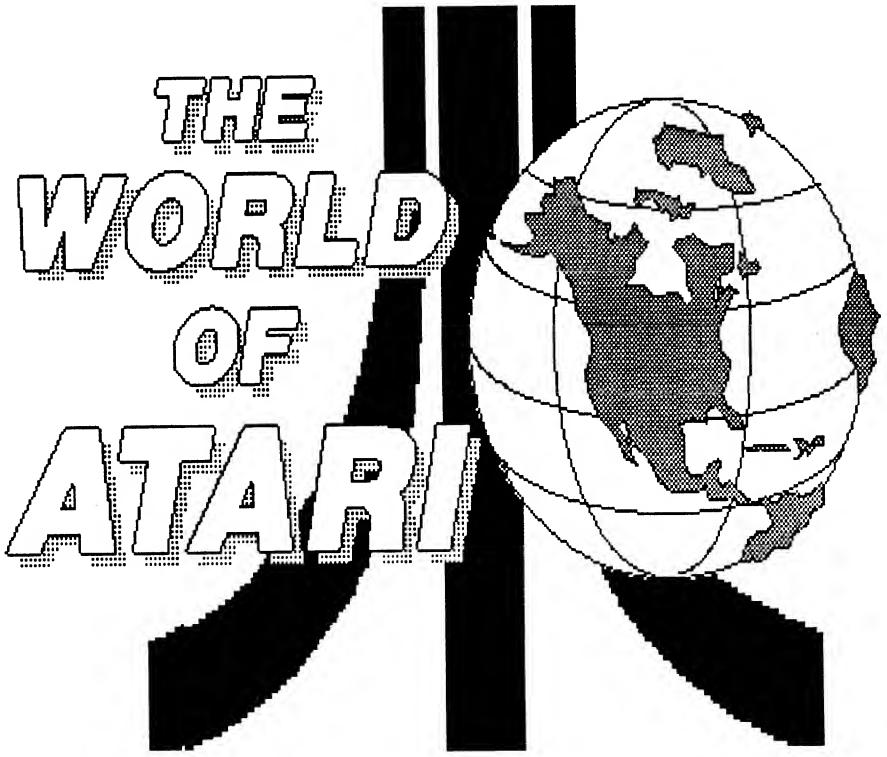

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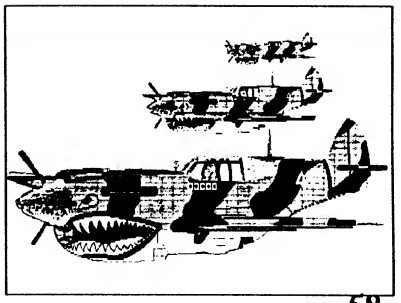

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TIME TO RENEW?

Check your mailing label. If you see an **8909** (9th month of 1989, i.e. September!) on the first line, then this is your **last issue** of CN. Get your renewal in right away to be sure you do not miss any issues. (If you see an **8910, 8911**, or **8912,** your subscription will soon be ending. Please try and renew early--it is a big help to us. If you belong to a WAACE club, renew via your club.

KEY:

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EDITORIAL

Eight months have gone by in "The Year of Atari." And although at this writing none of the new Atari goodies are available, prosperity is, nonetheless, just around the corner. The **Portfolio** is not out yet, but almost so (just one final FCC blessing required.) Similarly, the new **CD-ROM** drive is not in stores but is in warehouses just waiting for some CD-ROM software titles to make the drive useful. The **Stacy** wasn't really expected out in the summer, at least by us, but should make its appearance in the fall. The new **Lynx** (the hand-held portable game system finally has a name) should be in the stores this fall. We expect to see the **Atari PC4**, an IBM clone, finally released in the US market, and, rumor has it, **two new 68030** computers (1280x960 monochrome and 640x480 color) will be announced August 25 in West Germany. The 2MB model will sell for $3,000 and the 6MB for $5,000 (hard disks included).

Even the spectacular emulator products have been delayed. Spectre, the Mac emulator, has been out for some time, but the new **Spectre GCR** that will let you read in Mac disks directly has yet to arrive. Similarly, due to a variety of supply problems, Avant-Garde's **pc ditto II** that turns your ST into a fast IBM clone did not make its summer debut. Hopefully, by the time you are reading this both of these products will be available.

I am a little disappointed that these goodies are not yet available, but I am hardly in a position to complain. I just had one month "off" at CN and planned to accomplish a great deal this summer. However, things just didn't work out the way I had hoped. Indeed, I didn't accomplish 10 percent of what I wanted and here it is time to put out another issue! Oh, well, sometimes things just take a lot longer than anticipated.

At any rate, I think it will be an interesting fall for Atari fans. In this issue you can read all about the impressive (and expensive) Moniterm monitor. Hopefully, in the three remaining issues in 1989, we will chronicle the US arrival of many more new wonders.

CN has been critical of Atari's lack of advertising in the US market. But last week, in glancing through the Business Supplement to the Washington Post, I noticed an interesting thing. The Business Supplement is normally jam-packed with computer-type ads. But there were no ads by Atari. There were also no ads by IBM, no ads by Compaq or Apple or Commodore. All of the ads were by local area stores advertising the products they carried. Thus, IBM (and compatibles) and Apple did get a lot of ad space. Unfortunately, none of these merchants carried Atari and none of the Atari stores were advertising; thus no Atari ads.

What is needed, apparently, is a little more grass roots support of Atari advertising. Well, CN can do its part. Listed below and on the next page are all of the Atari stores I know about. I know about these stores because they carry Current Notes. If you want to know where to go to get the new Atari products, check the stores below. (We will publish this list periodically. If you are an Atari dealer and would like to be included, just let us know.) Now, if only Atari would do its part and sponsor some national TV ads to help build up demand...

Joe Waters

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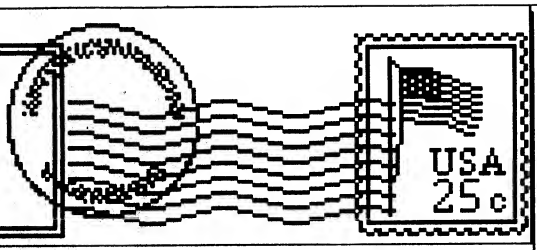
Letters to the Editor



Put Your 800 To Work!

Dear Editor;

All right, I'll confess: as a practicing general surgeon, I use my Atari 800 for "business."

I do have other equipment: an IBM PS/2 sits in front of my secretary and communicates with the hospital network. The little Atari is my personal unit.

You see, I've grown attached to it, for a number of reasons. It was my first computer, and I'm quite used to its quirks; as a touch typist, I haven't found a better keyboard yet (with the exception of that long reach over to hit the right shift key, it's better than the IBM!); and it has given me yeoman service as a word processor, taking care of my personal correspondence and my Cub Scout den's newsletters for years. Even after an IBM model 25 replaced it as my home computer, it didn't seem right to just toss it in the closet.

When I remodeled the front office, I moved my secretary's old desk into a back room and installed the 800 on it. A little work with a circle saw made for a neat installation, with no exposed cords; and I used an angle bracket to attach a tiny shelf to the wall, so that the monitor is suspended over the CPU with just enough clearance to open the hood. It looks quite elegant, and not at all out of place in an office environment.

I had worried about the practicality of "saving" the old 800, in this day of MS-DOS and megabyte RAM. Six months later, I'm delighted that I did! The little unit gets almost daily use. I keep my operative log on it, using SynFile; the old software is quite adequate for this purpose. The output, from a Panasonic 1080i, looks every bit as good as my IBM proprinter. I even have a few of our commonly used forms on disk, and just run them off as needed, using *Atari-writer Plus*.

Now I'm NOT advocating that you run out and get a ten-year-old 8-bit for your main computer. What you already have is all you'll ever get, so far as software goes! I AM trying to say that, within their limitations, the 800 and 800XL's were good and enjoyable machines; if you've got one already, why not use it instead of letting it gather dust?

To have equipped my office with a second MS-DOS machine, for me to use as a "personal" unit, would have run at least $800, even if my taste ran to Commodore clones. Since I ALREADY HAD the Atari, I am enjoying the luxury of my own unit for no more than the effort I put into moving it from closet to desk and the price of an extra printer ($160). It's been well worth it, and if you like your Atari, I'd encourage you to do the same.

Bill E. Barry
Tampa, Florida

Thanks, Bill, that's excellent advice. I recently pulled out our old 130 and set it up with some games for visiting nephews. They are long since gone, but my kids are still involved daily in trying out old classics. --JW

Worst of the Worst?

Dear Joe,

I think I have a winner in your search for the worst Atari software of all time:

"They're mad... They're hungry... They're Rabbits!" So says the packaging of ALA Enterprises' 1983 release of the arcade game titled *Lepus Revenge*. The game contains no inside documentation whatsoever. Game play is described on the package as simply to dodge the rabbits and shoot them to accumulate points. The graphics are sparse, blocky and choppy. The disk program requires basic and at least 32K of badly wasted memory. To add insult to injury, there is a strong warning against unauthorized copying of the program and a $5.00 service charge to replace a defective disk (if you still have a proof of purchase).

The success of ALA Enterprises is, in itself, a testament to the quality of this software. I will gladly send this program to an unbiased judge who can then compare it against any other nominees you receive. I am confident that he will agree that *Lepus Revenge* is to software what "Plan 9 From Outerspace" is to films, and that it is everything I described, and less.

David G. Grace
Murrysville, PA

Sales Per 1000!

Dear Editor,

That does it: now I'm really annoyed. I just bought another ST magazine and found yet another copy of the letter from one Gilman G. Louie, Chairman/CEO of Spectrum Holobyte, complaining of piracy in the ST environment. I quote from one version of that letter:

"...within 30 days of releasing *Falcon* ST, pirates had put the product up in the bulletin boards." "The Amiga version already has double the sales volume of the ST, even though Amiga *Falcon* has been on the market for only six weeks while ST *Falcon* has been released for 9 weeks."

The following comments and questions come to mind:

(1) How long did it take for a pirate version of Amiga *Falcon* to show up on BBS's? What about the Mac version? And *Falcon* IBM?

(2) How does the established base of ST users in North America compare to that of the Amiga? Compare sales per thousand users and let's see how we stand.

(3) Let's probe even deeper: does Amiga *Falcon* work on every Amiga sold? Does *Falcon* ST work on every Atari system sold?

I can't answer the former, but the answer to the latter is a resounding "NO!!": it is a 'color only' product; I can't use it on my monochrome monitor (a check of Spectrum Holobyte's *Orbiter* for the ST shows that it is also 'color only' but is available at an additional cost--in other words, you buy the color version, send SH more money, and I would assume your 'color' disks, to prevent you giving that version to another ST user, and wait until SH and the postal services get around to returning the version you wanted in the first place!). If you want to sell more product, make it fully compatible.

My friends and I don't consider ourselves pirates: we buy what we use (a partial list of my commercial software purchases is attached--as you can see, I've bought my share of lemons and duds). However, I suppose that we will be branded as such, since we belong to a software rental club, and have often group-tested software that we have purchased (I bought *LDW Power* after working briefly with a friend's *Logistik*; he bought *dBMAN V* after trying my *Superbase Personal*; three of us bought *Hotwire!* from Charles Johnson at the MACE show in Detroit a few weeks ago!).

I don't deny that piracy exists. However, I do think that Mr. Louie's impassioned letter distorts the issue: compare apples to apples (sales per 1000 units), and produce a product that all of us can use, and you might see a change in the situation.

Dennis Hommel,
Belle River, Ontario

PS--I think the thing that upset me the most about Mr. Louie's letter was the fact that I had purchased *Fleet Street Publisher*, which SH distributed in North America, and got absolutely no support from his organization!! Why should I go out and buy his products now?

You're right, Dennis. To get a fair impression of integrity by computer brand user, one should use statistics based on the relative population sizes. Of course, we could be veritable saints in the Atari world yet, if the population is not large enough, vendors still couldn't provide products for the Atari market and make a profit. The answer is really quite simple. All Atari has to do is concentrate on selling Atari computers in the US market. So far, Atari has not done this. Maybe next year. --JW

MOTerm Elite V1.41

Dear Sirs,

Enclosed are two disks containing several programs that I have written for the Atari ST and feel are the best at what they do. Included is a telecommunications package, which I call *MOTerm Elite*, which I have just released into the shareware market. It features many things that no other terminal packages contain, including medium or high resolution graphics which can be exchanged over the modem automatically, sound that can be transferred online, a new file transfer protocol called Dmodem that is faster and more accurate than Xmodem, a built in text editor for editing of information captured off of a modem or other files, an automatic dialer that will dial phone numbers while you do something else within the program, the fastest Xmodem file transfer routines yet available for the ST, and much more. Also included is SpcUtilities, a disk containing many useful Spectrum 512 utilities, such as: a program to print Spectrum 512 pictures directly to the printer, color or black and white, a program to convert Spectrum 512 pictures to Degas PI1 pictures focusing calculations of colors on a specific area of a picture or on the entire picture, SpcView, a GFA Basic program to view Spectrum 512 pictures.

Each of these programs included is shareware, but I feel that these are good enough to be placed in your public domain library, and I feel that ST users in general would benefit from the use of these programs.

The requirements for MOTerm ELite are: 1 MegaByte RAM, and a modem. SpcPrint requires an EPSON printer capable of printing at 240dpi, as well as a source of SPC, SPU, PI1, and NEO pictures. SpcConvert requires SPC or SPU pictures, and SpcView requires the same. Documentation for these programs may be purchased for the fees listed in the included Readme or Txt files on the disks. Thank you again for your time, effort, cooperation and support.

Doug Johnson
Houston, TX

Thank you Doug. The Spectrum Utilities were introduced last month as CN #346 and your MOTerm Elite 1.41 as CN #347 (actually, this letter should have run last month, but was pulled along with all the others to make room for the Atari announcement of a new hand held game system). I enjoyed the reprint from ST X-press (December 1988) that talked about you and your programs. (For the information of our readers, Doug started programming on a PDP-11 when he was 6 years old and has had experience with the Apple II+, the TI 99/4A, the Atari 600XL and 800XL, and, finally, the Atari ST. Now finishing his sophomore year in high school, Doug's MOTerm has received excellent reviews for its many advanced features.) I'm sure our many telecommunications-minded readers will be anxious to try out your handiwork. -JW

Back from the UK

Dear Sirs:

I am returning to the States this August after two years in the UK .... I must say, it has been an interesting experience being in the UK these past two years. The Atari appears to have more support over here than it does in the Chicago area (both the 8-bit and the ST/Mega.) There is an all Atari show held in London twice a year, three days each at the Alexandra Palace--a very large exposition hall is available and has been packed each of the three trips I have made so far. Even Atari has displays at the show each time and sets up a gaming booth and programming tutorials. There has

been some software development--primarily games--for the 8-bits, although at least about 15 or so vendors carry the software across the country (roughly about the size of Illinois but with 60 million people.) Mail order is used extensively and deliveries tend to be very prompt.

There are at least two Atari 8-bit magazines supported over here. One is a club supported magazine--*Monitor*, which carries a wide range of articles. The other is a commercial magazine, *Page 6*, which merged another commercial magazine, *Atari User*, into itself. *Page 6* is the more serious of the two with *Atari User* being devoted to the game fanatics. *Page 6* deals with utilities, programming, etc. I will be continuing my *Page 6* subscription on my return. It also offers a disk version and offers a very large library of programs some 80+ disks with disks being added monthly. *Page 6* also offers support for the ST with both articles and a program library.

It will be interesting to see how much of the software I have gotten over here fails to work properly on my return to the States because of the differences between PAL and NTSC TV standards.

Be with you in the States in August.

Wayne A. Booth
Minety, Wiltshire, UK

Welcome back to the States, Wayne. I have been getting *Page 6* for some time now and find it to be an excellent resource for 8-bit users. Annual subscription rates (6 issues) are 13.5 pounds (sea) or 21.00 pounds (air). Write to Page 6, P.O. Box 54, Stafford, ST16 1DR, England. --JW

Off to the UK

Dear Mr. Waters,

Thank you for your note reminding me about re-subscribing. I've moved to the UK for a couple of years (I'm an analyst working on Air Traffic systems, and they're in the process of upgrading it here). In the move, chaos reigned and I'm just getting things like subscriptions (and checking accounts, and credit cards) redirected over here.

I would certainly like to continue my subscription--*Current Notes* is the only US ST magazine I'm bothering to have sent over here. *START* and the others are bettered by Brit magazines like *ST WORLD* and *ST ACTION* and such like, but I haven't found one that contains your mix of articles and features. I especially enjoy Small's column--his discussion (at least mention) of PLATO, his Tesla series (I had just finished his bio at the time), personality types (just after I had taken the Miers-Briggs--I'm INTP, typical programmer material), etc. He somehow parallels my interests and incidents (even with his notes on CompuServe's ST developer forum).

The ST situation over here is like a dream--little corner stores stocked with ST titles, a slew of magazines of varying quality and as many STs around me as IBM Clones. The only dose of reality would be Atari themselves. I kind of expected them to be more supportive here, as it's such a better market for them. But it seems that their philosophy of "let the computer sell its own damn self" is international. In fact, their developer support person is nowhere near as helpful as in the states. I tried to get a monitor from them and after the first few calls weren't returned, was finally told to ring back and speak to the Sales department. They told me they don't DO developer sales directly and gave me another number. That wasn't the right one but they gave me the correct number where I was eventually helped. It seemed as though I was the first person to try and buy something from them. Ever.

I spoke with someone about doing an article or review for CN--months later, I've gotten around to it and found something worth reviewing--Aladin. The product is impressive and Mr. Dale has to be the most supportive salesperson I've ever dealt with (incidently, he has no idea that I was doing a review). He asked me about ST fairs in the US--he'd like to hop the Atlantic and demo some stuff there (Signa sells Hawk scanners and some nifty Optical Char Reader software). If you could contact him about the big ST annual you guys are a part of, I'm sure he'd appreciate it.

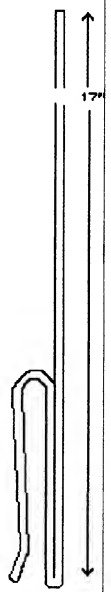
Bill Hand, Jr.
Twickenham, Middlesex UK

I enjoyed your review very much, Bill. In fact, it is printed in this issue. I asked Dave Small about Aladin and, apparently they are one of the (few) efforts that have been done completely independently of Dave's Magic Sac work. Dave's current efforts are being hampered by what seems to be becoming very commonplace in the computer industry, lawsuits. It's a shame. The Mac emulator is one of the really bright spots on the Atari market. --JW

A Fix for the 1050

Dear CN,

As a user of an Atari , I have had trouble with the 1050 disk drive failing to load because of overheating and have solved the problem with the addition of heat sinks. These were made of 1 by a little over 1/16 inch steel strips purchased at the local hardware store in strips 30 inches long and cut in half. The ends were then bent so they clamp the sides of the aluminum hot box and extend 12 inches through the top and are thus exposed to the air for cooling. By mounting them on the sides extending through the top with slots 1 3/8 inch long, the top can be reinstalled without removing the front from it. Of course, aluminum or copper would be better, but steel seems to work all right and because of its stiffness really grips where it clamps to the sides two inches from the back.



Robert Street
Apopka, FL

Showing CN to Company

Dear Mr. Sommers,

Out of the Closet Dep't ... Never causing much more than small snappings in the center of my brain, I none the less rejoice!--that CN now generally uses the expression "it's" to mean "it is" and "its" as a (possessive pro)noun like "his" or "her" ... It's to its credit!

...And further credibility. Now I can show CN in company more conventionally respectable (and likely richer) than that of clearly creative, addicted, chance-taking, and thus probably degenerate other Atarians!

Harmon L. Thompson
San Jose, CA

P.S. ... Yet Another Winning Notion (Y.A.W.N.?) for the (maybe CN's?) bubble-file/-machine:

...Now that, due to the new Spectre GCR and p.c. Ditto II hardware emulators, the ST may actually become THE GENERAL PURPOSE MACHINE, does any entity, including CN and its self-enslaved minions, track import-export file format compatibility amongst ST, PC, and Mac programs, and specify how achieved? -- i.e., what if any intermediate transfers needed, what source for these utilities, etc.?

...I for one vote for cross-referenced lists: of function, file extension names, filenames, programs, transfer programs, and for which emulator version of which machine version usable. Such, on disk for one's own printout, would be enough, though I'd pay good bread for an updated wire-bound book thereof: with periodic updates...???

...As a small personal example, I currently need a modest 3-D CAD program with which (1) to make 2-D line, circle, and arc segments, of origin and (circumference and chord) length certain, that I can place in desired positions and then transfer the drawing via DEGAS file format to DEGAS E. or SEURAT, etc., for further effects, cleanup, and color printing: with the same 3-D program also to make (2) 3-D projections and print up as finely detailed drawings as bases for "conventional," other color media renderings and paintings ... I may end up buying *DynaCADD*, which would permit both functions: but I (and my pocketbook) feel there must be some program less massive (and expensive) than *DynaCADD* out there, or some process, whose screens also could be saved in (or eventually be transformed to) DEGAS format files ... Listings as described above might lead me to it..???

...HLT

Thanks for the kind words Harry. All of the credit for our spiffed up text goes to JW (Joyce Waters). It takes longer to get each issue ready, but the results are worth it. - JW

Super Sub-Cal

Dear Sirs,

I wish to send thanks to J. Andrzej Wrotniak for releasing his excellent *Sub-Cal* program into the public domain. I am a computer science student here at FSU, and I use this program almost daily. It is much easier to use than either *Mathematica* or *Eureka!* I use it in conjunction with *Ultragraph* (ST-Log) and *Sci-Plot* (Start), both excellent programs in their own right, to give me the math tools I need right in front of me when I am working at my desk. My colleagues are quite surprised when I tell them that all three programs are (sort of) in the public domain. I find that these and other PD software packages--*Uniterm* (CN#303), *DCformatter* (#344), *Mousedoubler* (#343), *Arcshell* (#255), and *SuperBoot* (#344), just to name a few--are important and much used programs in my software collection, and make things just a little bit easier every time I use my ST. On no other computer system have I seen such support or quality in this type of software. Thank you, Current Notes, for providing so much of that quality PD software in an easily obtainable form through your PD library.

Regards,
Mickey Boyd
Tallahassee, FL

MIDI Review Incomplete

Dear Joe,

I was quite pleased to see you begin a MIDI column within Current Notes. The Atari MIDI market is expanding so quickly that current and prospective ST owners need a variety of information sources to stay up to date. Author Lee Whitman should offer an excellent perspective, as both a music store owner and Atari dealer.

I take issue, however, with his recent review of *SuperScore*. While it is a good product, in no way does it qualify as "the most complete sequencer-scoring package for under $500." For example, it lacks any ability to edit controller information or even program changes. This alone precludes it from consideration for many applications. Do you really want to have to re-record a part just to add in a program change? Other points not mentioned are that the program comes on a double-sided disk (surprise for you single-sided drive owners), it uses cartridge port dongle protection (offensive to many) and the ability to use four output ports is only with purchase of the Sonus interface box (not part of *SuperScore*). There are more--both good and bad.

The above is not meant to denigrate the program; *SuperScore* provides excellent score editing features and will be updated to use GDOS for all output in the near future (providing laser support as well as improved graphic quality). In fact, a good case can be made for using a better stand-alone sequencer and importing your music into *SuperScore* via standard MIDI files (also not mentioned in the review.)

My point is that the review was incomplete and potentially misleading. The ST MIDI market is heavily competitive for limited consumer dollars (over 30 sequencers alone!). Readers need sufficient facts, as well as a flavor for a program's strengths and limitations under fire, to make an informed purchase versus similar offerings.

Jim Pierson-Perry
Elkton, MD

SATRAPS, SUMMER NOISES, RE-ALIGNING REALITIES, & SOME GOOD NEWS

ST UPDATE by Frank Sommers

The Family Store

"If history is any kind of teacher, the key to success in running a large, publicly owned family business, often, is to let someone else do it.

"The test of history has shown that it is very dangerous for a family to run a big firm," or so says one of Harvard Business School's most illustrious former professors, one Alfred Chandler.

Why the sudden interest in mercantile empires? Because the business world is abuzz with the collapse of "The Wang Dynasty." Son Fred, 38 years old, accompanied by "The Doctor", as COB father An Wang is known, was forced to fall on his sword before the Board. His tenure as president had lasted only three years, but tucked into his reign was an "unsuccessful" 1988, i.e. almost half a $billion in the soup.

This set the historians to pawing their notes. And though The House of Atari was never mentioned, such other family satraps as Sarnoff of RCA, Dupont, Ford, and Rockefellers were cited. And cited as families who preserved their fortunes by installing well-paid professional managers. Vanity is apparently an awesome thing, a thing that can burn the heart right out of a successful company. Son of Wang may not have been responsible. In fact by the time he took over, the blazing grass fire of hyper-technology had already burned past the company door, which hadn't been open wide enough to sense a quick silver change in the industry and get products out that could keep up with it. So those Atari lovers among us, who delight in throwing silicon at Sam, because the company is failing in its considerable promise, might look also to dad. Did his nose miss the zyphers of change that were blowing throughout the industry; was he the one who was out of touch? And is it too late for Sam to spin the helm and change the course? Because as the archeologists of industry also know, not all dynasties collapse. Some have evolved into fabulous successes, above and beyond those that were mega-disasters.

The Sounds of August

In Atariland U.S., on the west coast, on the east, in the south, with a number of exceptions of course, come the disgruntled, discouraged, angry voices of dealers, aflame with the fear that not only their businesses but also a great machine are being needlessly scuttled. When asked why, they point to the summer lightning of firings.

Atari has fired all of its regional representatives. And it has turned to a large manufacturer's rep to deal with dealers, thereby eliminating the need to pay employee benefits. It has fired or caused the resignation of the new head of the user group unit, Chris Robert, who seemed to participate effectively in the World of Atari shows. It has fired its last ad agency, who barely had time to turn in its intended ad campaign with $$$'s attached and is starting on its sixth ad firm. All that after a pretty successful late winter and spring of "cleaning house" and getting rid of a number of valuable people. There are mutterings in the hen house that Sam's second in command and "acting jack" when he's away and sometimes when he's there, is a great bookkeeper with a green eye shade for a halo and a keen sense for finances, but a strong aversion to having TV ad debits show up in the expense column. This gentleman, Auggie Lagore, has purportedly inherited a teflon suit from Jack and is "fire proof," no matter how much he may steer in the wrong direction.

So with all of this, are dealers giving up hope? No, that's not in the hearts of Atarians. They turn to whomever and whatever spiritual leaders and deities they have and pray for new products to arrive in time, long enough before Christmas to bring salvation.

1990?

After all, this was to be the year, the year that Atari announced it intended to double its ST base in the U.S. By our calculator, that would mean selling some 200,000 machines here. Then in May, Sam said they expected to sell 100,000 machines. Well, the year is fast vanishing, like a rabbit in a reverse hat trick. The "new wine" that was promised in the form of laptops and handhelds, the "new wine" that would cause the U.S. to start singing Atari's name and have every executive holding an Atari Portfolio is still at the Atari distillers, the FCC. Dates are slipping faster and faster as the 4th quarter approaches. Taking the lower number of machines, the 100,000 figure, we estimate ST dealers would have to have been selling 50 Mega's and/or ST's a month to meet Atari's goal. What will the annual U.S. sales actually be. Our "perestroika" source in Atari says it will be closer to 12-15,000 for the year. That would be an average per dealer closer to six per month versus 50. So, next year is being designated as, "The Year of Atari, U.S."

The New Reality

Lest that all sound overly depressing, let's look at the reality of the matter as Atari sees it. What

does Atari plan for this last quarter? First, Sam has announced via the September issue of START magazine, that he expects to sell 200,000 portfolio's between now and the end of the year. If it clears the FCC in time to start selling in September, and assume 50% of that will be in the U.S., that will mean they only have to sell 25,000 a month to meet the quota. Now most dealers are aware that they will have "a dealer exclusive," meaning that only authorized dealers can sell it, for the first 4–8 weeks, that is. They've all been promised "verbally" that they'll receive an initial order of at least 10. Are they excited?

Well, the profit on 10 Portfolio's, listing for $399, even if they could keep 50% of it, would be less than $2,000. And in that first month or so, it means the 200 plus dealers will have sold 2,000–2,200 units. So what about the other 20,000 plus that must be sold in September, not to mention the 25,000 each in October, November, and December, to meet the target. Is Atari going to sit on them, and wait for the dealers to savor their glory before pouring them into the mass market outlets. "Gnot Bluudy likely," as they say in Warsaw. When the product arrives at the dock, it's off to the market wherever it is, and the knowledgeable dealer knows it.

But the STacy? In the same breath, Sam announced that Atari's Taiwan plant was tooled to produce 35,000 STacy's a month. Now those "definitely" will be for dealers only. But again, after dividing 200 dealers into the US share of that production (17,000? machines) leaves a pile for each dealer that would make the five mega's or ST's they actually sell each month right now look puny.

But that's not all. You've heard of "Next," Steve Job's latest next generation computer with an optical storage device and a $10,000 price tag. Atari's management "hopes to clobber [Next]...hopes to be making money from the TT before Next comes out in any volumne." All we can say, Atari, is we don't know what you use to keep your spirits so high, but we do earnestly hope your latest projections prove out.

The Good News

The real news, the count-on-it-be-true news is that in addition to European software selling quite well at all the dealers who have it (Distributor: Sideline Software--1-800-888-9273), we are about to be buried in a cornucopia of third party goodies for our machines. Dealers can now take orders for *pc ditto II*, which suggests that half-price coupons for warranteed owners of the original are not far behind; in fact, you should have them by now. The device itself should then quickly follow, Avant Garde owners not liking to hold other people's money more than a fortnight or so.

At the same time that you're running IBM software at full speed on your ST, Small's GCR cartridge should be on the street and turning your ST or Mega into a many-gaited work horse, with Mac software running out of the box.

The Moniterm, monitor of all monitors for the ST, will be here, along with Migraph's handheld scanner, plus fax machines, and a race between Michtron and ISD of Canada to see who can get their high end DTP upgrade out first. Will it be *Fleet Street Publisher* or *Calamus Outline*.

The point of it all is that third party developers continue to devote their ingenuity and time to producing excellent products for ST's and Mega's. Even though you can't see your favorite computer advertised on TV, you will be able to give your checkbook a fine workout at your favorite Atari dealer. By way of example, one of our authors recently sent us a PostScript file he made with his Spectre 128, transferred to the ST and then printed out on his Atari laser with *UltraScript*. As quickly as we could de-arc it, we had it coming out of my printer with very pleasing results.

Finally, Illinois Institute of Technology, second only to MIT, is switching to ST's for its desktop computers.

Europe's Top Ten

This summer England's top entertainment performers, off the dealers' shelves, were different but not unlike those in the U.S. In descending order, the top ten and their software houses were: *Falcon*, Mirrorsoft; *Barbarian 2*, Palace; *Foft*, Gremlin; *War in Middle Earth*, Melbourne House; *F16 Combat Pilot*, Digital Integration; *Lombard Rac Rally*, Mandarin; *Galdregon's Domain*, Pandora; *Ballistix*, Psyclapse; *Double Dragon*, Melbourne House; and *Operation Wolf*, Ocean Software. (Movie goers might be interested to know that *Batman* was number 20.)

What about America's top ten? Only #1 *Falcon* appeared on a ranking compiled by ST-Express and in the same #1 spot. The other U.S. titles as ranked 2–10: *King's Quest IV*, Sierra Online; *Captain Fizz*, Psygnosis; *Dungeon Master*, FTL; *Police Quest II*, Sierra Online; *Techno Cop*, Epyx; *Gold Rush*, Sierra Online; *Zany Golf*, Electronic Arts; *Baal*, Psygnosis. Interesting that one company takes up three of the slots. We also suspect that some of the European labels will be appearing at the top of our list in the near future. Two European imports in particular are receiving large distribution by Sideline Software in Miami (Repeat: 1-800-888-9273). We expect *Populous* to be near or at the top of the list by next month, with *Millenium 2.2* close behind.

Mindscape New Releases

One of the ST's better software backers is Mindscape. Its last ST hit was *Captain Blood*. In addition to *Hostage*, already out and obviously current in the present state of world affairs, the company plans to release three new programs for the ST which should be on dealer shelves as you read this. *Shinobi*, is a fast-paced Sega marshal arts game. *Fearless Freddy's Big Top O'Fun* is obviously a circus environment (and possibly the longest title in record), and *After Burner* takes you up there in an F-14 where things begin to happen.

CDAR

Is it here? They say you can buy it in Europe. One of the longest promised Atari products, the Atari CD-ROM player may be about to appear in this country. There is no word on what programs will accompany it, but presumably an Encyclopedia and.... At $599 the success of CDAR 504 will depend on available software and the utility of such massive data files. How about all the PD software available for the ST on one disk?

The Mac has been having limited success with its CD-ROM player which is double the price, but has several disks available for it, including one game. Atari should have the edge with the lower price, which makes it easier to rationalize buying it as a curiosity and waiting for the software to catch up.

Possibly Serious?

As noted, Atari apparently has hired a new representatives' group, the large and quite well-known BSA Firm. One of their mission "impossibles" is to expand the dealer network asap. To that end Mac and IBM clone dealers, and former Atari dealers in Tennesee, Georgia, and North Carolina are receiving solicitations to come see the power of the new Mega's in action. Atari has brought in Nathen Potechin, President of ISD, Canada, who appeared so successfully in the TV program about the ST several months ago. He was seen in Raleigh, Knoxville, Atlanta and Charlotte whipping and popping *Calamus* thru its hoops. The effort is apparently successful in bringing back former dealers and getting the Mac and IBM clone dealers to carry the "new product." Good luck, BSA. Good move, Atari.

Dealer's Talk

"The ST machines just aren't there. Unless the dealers tell us a given machine is selling like hot cakes and they need more software for it, we tend not to update or do new programs," explained Jessica Chipkin, Marketing Manager for Timeworks, and its excellent DTP program for the ST. "There is nothing new in the works for the ST. I know, generally, 12 to 18 months in advance of any product. Now GST in England may be doing an update of *Publisher ST*, because the ST is much bigger there, but we wouldn't necessarily distribute it in this country. No, nobody else would; we have the exclusive for that." To the question of font disks for the program, "We won't be putting out font packages for the ST as we had planned, but we may try to include more fonts with the program itself." She did add an encouraging note to the effect that after the update for the IBM for *Publish It* is finished at the end of the year, Timeworks might decide to port that over to the ST, "because that isn't a big deal to do that."

Indicators

Computer Gaming World, one of the few computer, game-specific magazines, in its July issue carries an interesting array of game titles for the Mac, the ST, the Amiga, and the IBM, as well as for other machines. Those of you who thought Atari was suffering from being dubbed "Only a Game Machine" might be interested to know that the Amiga has more than twice as many game titles as the ST, i.e. for the ST only 30 are listed versus 75 for the Amiga. The Amiga seems to prosper despite this. And the IBM? Well, if games could kill, then the IBM is extinct with 150 titles cited. Only the Mac seems to prosper in a fewer-games-the-better environment, with less than 20. It's clear what this says about the ST, isn't it?

Erratum

Last month we said we had heard that the San Francisco Chronicle had shut the door on Atari because Atari wanted a rebate on their ad costs. Wrong, Leprosy Fingers! You should have typed, "...because Atari had declined to pay their past due Federated advertising bills."

Discount Backup?

Hard drive owners are almost pathological in their obsession with hard drive failures and backing up their files. Most hard drive "old timers" will tell you this kind of pathological behavior, even if a might expensive, is the only route to sanity. Last month's editorial by Publisher Waters describing his disappearing data seems to confirm that view.

Seymour/Radix of Irving, Texas is coming out with a backup device that uses tape carridges from your TV's VCR. One end of the 100-meg, backup system plugs into your computer's cartridge port, the other in the TV input of your video cassette recorder. Turn on the VCR to record and start your software program and by the time you've finished dinner and the dishes, i.e. 90 minutes later, you will have a complete backup of your 40 meg hard drive.

The device, called "DVT-VCR," will sell for $295. It uses standard video cassettes for backup tape. The initial version will backup complete partitions or individual files and let you restore them the same way. The authors will have an update available shortly, at no extra cost, which will do a mirror image backup of your disk, at a speed of 1 meg a minute. But the price of speed is the loss of the ability to backup and recover individual files, versus having to reload your entire drive with the mirror image system. Brian Windsor of Seymour\ Radix expects a constant improvement in the speed of the file by file version; said improvements will appear in regular upgrades.

Considering that a 100 meg backup would consume more than $100 in disks, the price is right if the device performs to specificiations. Those of you who have stereo VCR's and who have turned them into digital audio tape recorders by connecting the VCR to your hi-fi system know that the fidelity and reliability can be outstanding.

Well, time to save this to disk lest I lose it.

Faster Than A Breeding Rabbit

Before computers, one of the fastest things in the world was a hummingbird's wing. The number of times it could go up and down in one second was astounding. Now one of the faster phenomenon in the computer world is the arrival of one more powerful processor chip after another. It all started with the 8088 chip used in the first IBM-PC's. Then with whirlwind speed there was the 80286 and the 80386 microprocess chips with oodles more power and speed. As one of the more lucid computer columnists, T.R. Reid, notes all of this race for speed and power has outstripped the developers' ability to provide either software or operating systems for these new CPU's. Before the 80286 could come up with an operating system, two years had passed and the 80386 was well into production. Does that come as a surprise? Well, for $4,000 dollars you'll be able to buy a board using the 80486 chip. Of course, there's no operating system available for its power and speed, nor software. But? But just around the corner is the 80586, which Intel Corp. is already working on.

Does all this mean that Atari is a tortoise, forever lost in the dust, with little but the still-to-be-seen 32-bit (TT) machine to keep its name on the list of "modern" computers. Possibly, because it wasn't IBM that spent the time, money, and man-power to develop these ever speedier chips, but rather a separate company that saw the money that could be made in a vast, vast market. Nobody's doing that for future Atari machines, except possibly Atari on a markedly reduced scale. Thus far, Atari has rationalized their predicament by claiming that their current machines haven't been fully exploited by software that uses all of the ST's and the Mega's speed and power. Looking at the plight of the new chips for the IBM, they have a valid point. But the question remains, what are they doing to stimulate development of software to meet that untapped capacity. Possibly more than we have as yet heard about, at least for the TT.

Tid Bytes

The Ubiquitous Man--Nathen Potechin hopes to have *Calamus Outliner*, the highly acclaimed illustrator program for *Calamus*, out on the shelves by the beginning of September. Potechin says that ISD has not decided whether it will produce additions to the current *Calamus*, in modules, such as *Calamus Outliner*, or in one complete upgrade as *Calamus Plus*. **SofTrek**--The company has a program update of *Turbo ST* out that beats the Atari hardware blitter in all monchrome scroll tests and is fully compatible with Atari's GDOS. Registered owners can receive V-1.6 by sending $5 plus their original disk to Softrek, P.O. Box 5257, Winter Park, FL 32693, or see their local dealer. ***dBMAN V* on a Sun Work Station**--Those of you who swear by *dBMAN* as the database program for the ST can now run your files on a Sun Microsystem computer. The $1,500 price tag for the Sun version might even make you proud to be an ST user. **Price Drop**--WordPerfect Corp. has cut the price of *Word Perfect* for the ST by almost $80, hoping to attract additional users. The "maintenance release," their term for a new version that is not a full update, still can't escape its programmer-jailer, who invariably, as the sun sets, finds yet another bug. **All New Version**--Hi Tech Advisers of Winter Haven, FL have released V-4.0 of *Video/Rental-Pro*. Those of you in the movie rental business can help your management discover a less-expensive approach to computerizing the business. As suppliers of business software Hi-Tech has a series of unique programs (Tele: (813) 293-3986). **For All The ST's**-Imagen's *UltraScript*, their excellent PostScript clone, is now available not just for the Mega's but for 1040 ST's. Called *UltraScript ST-1* it sells for $195. ***LDW POWER***--Ver. 1.10 has just been put out; writes *Degas* files, with more fonts and printer drivers, and improved transfer to and from Lotus 1-2-3. **Making Music**--*Jam Master* from Alpha Systems of Macedonia, Ohio turns any inexpensive MIDI keyboard into a full featured digital sampling synthesizer; turns 0's and 1's into sounds ranging from a howling coyote to a symphonic orchestra. **TOS 1.4**--Though it hasn't been released for sale yet, Atari is putting patches for TOS 1.4 up on GEnie.

Speed Merchants Beware

From Michael Ritzert of the Institute of Geophysical Science at Mainz University in Germany comes word that speeding with your DeskJet Plus and your ST can be dangerous. He "killed" the printer port using a fast driver, TeX-Systems, with his Mega ST4 and the DJ Plus. The problem occurs only with the DeskJet Plus and when the DJ Plus is used with a high speed driver doing graphics at maximum resolution. "Due to the higher data rate, the mean current per unit time is several times higher than the slower DeskJet. This higher average current was probably too much for the weak printer port of the ST." He solved the problem by putting a "resistor" into the line, using two 7407-ICs and a capacitor of 100 mF. Alternatively he says, "You can buy a printer cable with the ICs built in, for about 70 DM [circa $48]."

Hewlitt Packard's headquarter's PR department has not heard anything about the problem, but acknowledged that the DJ is not targetted at the Atari machines and they might miss this kind of data. They add that any indication of trouble would be noted by the customer service representatives. A check with the people in Boise, Idaho where the DJ is made discloses that they have not heard of a problem as specific as this, but have been told there is an occasional incompatibility problem with the DJ Plus and the ST's, because they state, "The centronics port on the ST is not a true centronics port."

Winter Challenge Released

A few issues back, CN printed a review of *Winter Olympiad 88*, a European multi-event Winter Olympics game. Although Thunder Mountain has had the American version (*Winter Challenge*) on the market for most home computers, the Atari 8-bit version has not been available in the U.S until recently. According to a reader, *Winter Challenge* is exactly the same as *Winter Olympiad*. It comes on two, double-sided disks and includes the following events: downhill skiing, ski jumping, biathlon, slalom, and bobsled.

When I called Thunder Mountain's parent company, Mindscape, their representative denied any knowledge of an 8-bit version. My source, however, assured me that he had a copy and was ordering others from Software Discounters of America. When I called SDA to order a copy for myself, the order taker told me the game was out of stock.

I did see the product advertised in last month's CN. B&C Computer Visions is selling it for $13.95. Let's hope that it sells well, and that its companion program, *Summer Challenge,* is soon released.

Atarian News

The August issue of ATARIAN maintained the slick, colorful standards of the first and was larger by eight pages. Included were thirteen software reviews, an interview with game designer Gary Kitchen, in-depth tips for playing *Jungle Hunt* and *Thunderfox*, shorter hints for a dozen other games, puzzles, letters to the editor, a new installment of the comic strip "Adventures of Atari," readers' favorite games, "Fascinating Facts about Atarians," and previews of future products.

After reading the first issue, I expressed concern about the overwhelmingly positive nature of all reviews. The newest installment of the magazine has done nothing to ease my concern. Negatives are non-existent. Either all two dozen games reviewed to-date have been brilliant, the reviewers are easy to please, or--as I fear--ATARIAN is little more than a public relations vehicle for Atari Corp. I know that Atari sponsors the magazine; nevertheless, I had thought Atari might allow the magazine's reviewers and editors more journalistic freedom.

Atari in the Classroom

Recently, Douglas Kittleson sent me a letter in which he explained what science coordinator, Earl Morse, Len Golding of Westcliffe Design, and Frank Pennich, electronics teacher at the DODDS High School in Wiesbaden, West Germany, are doing with the Atari 800.

Mr. Kittleson also sent printouts and explanations of the eleven programs designed by Golding for use in the DODDS school. They include the following:

- ALARMCLK--triggers an event at a pre-set time of day.
- TIMELAPS--designed originally to drive a time-lapse photographic system. The program also can be used to drive slide-projector carousels.
- BISTABLE--measures such phenonema as the time taken for a model car to travel between two points, or for a ball to roll down a ramp.
- COUNTER--sufficiently sensitive enough to count the number of drops falling from a pipette or the number of ball-bearings dropped one at a time through a gate.
- PENDULUM--displays the period of a pendulum which is arranged to break the beam of an IR photogate on each swing.
- ROLLBALL--used to measure the time taken for a ball to roll down a ramp.
- TRIGATE--similar to ROLLBALL, but uses three photogates placed at different levels on the ramp.

Anyone interested in learning more about these programs may do so by writing Douglas Kittleson, USMCA-BK, Box 138, APO NY 09252.

A Healthy Wish List

Fifteen-year-old Adrian Calame of Upper Marlboro, Maryland, has attended the past four Atarifests and has gone away frustrated. On every occasion he saw ST titles that he liked but could not find 8-bit versions. A loyal 130XE owner, Adrian voiced a few concerns in a recent letter to CN.

"It looks like the 2600 and 7800 machines are getting *Double Dragon, Rampage*, and *Ikari Warriors*...," Adrian writes. "I want to know why the XE couldn't receive any of those titles."

(With three machines to support, Atari cannot put all its chickens into all baskets at the same time. Traditionally, stand-alone game machines have been the principal vehicles for playing arcade games, while computers have handled the more complex simulations, etc. Obviously, that is a generalization which often has proven untrue: for years computers have been running great arcade games, and recently game machines have been handling difficult simulations (*Ace of Aces*), complex adventures (Nintendo's *ZELDA* series), and the like. Nevertheless, this somewhat outdated rationale might be part of the reason why Atari is first releasing the titles you want for its game machines and others [e.g., *Mean 18*] for the XE. If the big-name arcade titles sell on the 2600 and 7800, and *Commando, Tower Toppler* and other new arcade carts move well on the XE, no doubt

Double Dragon et al. soon will be available on the 8-bits. We are reviewing 7800 products to keep our XE readers informed as to what is out there for Atari's other relatively sophisticated non-ST machine. In that way, we hope to engender a healthy spirit of competition between the two. Also, if certain titles are not released for one, then perhaps our readers will consider purchasing the other in order to have access to more Atari titles. After all, a new 7800 costs a mere $59.00; a new XEGS is retailing for $99.99. The cheapest Commodore 64, plus drive, will run you nearly $300, while an IBM clone package with comparable graphics or an Apple II (with inferior graphics) will break most teenagers' banks. Those are the only three systems that have the huge library of past and present game software that the XE and 7800 [plus 2600] do.)

Adrian included nine titles he would like to see translated to the XEs: *Outrun, Contra, Afterburner, Robocop, Bird & Jordan--One-on-One, Test Drive, Ten-Yard Fight, Winter Games*, and *California Games*.

(Although it's worth a try writing to all the companies producing these titles, I would recommend contacting EPYX [publisher of the latter two titles]. EPYX, the developer of the new Atari Portable Color Entertainment System *(now named: the LYNX. -jw)*, will be producing a number of games (including *California Games*) for that system. Also, *Summer Games*, *Winter Games*, and *California Games* are available for the 2600/7800 (some also available in 7800-specific versions). EPYX and Atari have a long--though not always solid--relationship dating back to the days when the former was called Automated Simulations [*Temple of Apshai*, etc.], and the latter was Nolen Bushnell's baby. If you're interested in applying some well-intentioned pressure, write or call Debra Simshauser at EPYX, 600 Galveston Dr, Redwood City CA 94063, 415-366-0606.)

As an owner of the 8-bit version of *Gauntlet*, Adrian received an offer form Mindscape, Inc. for a special price reduction on *Gauntlet 2*. Unfortunately, no XE version will be available, and Adrian and other *Gauntlet* owners are justifiably outraged.

(Your contact person at Mindscape is Lisa Petrison, Mindscape, Inc., P.O. Box 1167, Northbrook, IL 60065-1167, 312-480-7667. According to conversations I have had with Ms. Petrison and others at Mindscape, there are no Atari 8-bit products planned for the future. I assume that includes *Gauntlet 2*.)

Finally, Adrian would like to see brief descriptions of the XE/XL public domain library disks supplied in CN. After all, ST disks are described. As Adrian says, "...I would like to know what I am getting and not being dissatisfied when I receive the disk."

(The XE/XL pd library is offered by one of the local Washington area clubs, NOVATARI. The contents of the library and the advertisement are controlled by NOVATARI. Perhaps the NOVATARI librarian can be persuaded to provide more detail on disk contents. -jw)

Atari Newsdesk

Below are some excerpts from Vol. 1, No. 1 of the Atari NewsDesk compiled by Larry Estep of New Albany, Indiana. We thought you might enjoy it, and we thank Larry and Atari Exchange of Louisville for their generosity.

Kentuckiana Atari Fest 1989. The Kentuckiana Atari Fest '89 will be held on the weekend of October 28th and 29th, 1989, at the Sheraton Lakeview Hotel in Clarksville, Indiana, which is located one mile from Louisville, Kentucky. Atari Corp. is expected to attend this event, and we have tentative commitments from ICD, Mastertronics, Innovative Concepts, and other Atari dealers and developers, for attendance and/or participation at the show or with the related events of the show. We will also have seminars and conferences on Atari related products and information, including a users' group forum with representatives from users' groups across the nation attending. Admission to the convention is $3 per day per person, $5 for a weekend pass per person, or $12 for a family weekend pass.

Interested dealers, user groups, or exhibitors--please read the special Dealer information file that is on the Atari Scene! BBS (502) 456-4292, or call (812) 944-8997 for more details on how you can be a part of this event. Information is also available on the Twilight Zone BBS (502) 897-1589, or the Twilight Zone II BBS (502) 955-6955.

Innovative Concepts News. I.C. proudly announces the following NEW products, available NOW. All three were programmed by Jim Steinbrecher of Sector One Computers (ORIGINAL author of AMODEM). They are being marketed exclusively by I.C.:

Print Shop Driver: 1020 - Yes, now you can use *Print Shop* and the *Print Shop Companion*, on the Atari 1020 Printer/Plotter! EASY to use and no patches or programming required! And, the printouts can be in ANY one color, out of the four possible (black, red, blue, or green)!

Print Shop Driver: Okimate 10 - Similar features as above (except only uses 1 color--black), and made exclusively for the Okimate 10 printer. NOTE: An earlier announcement of this Okimate 10 Driver did not mention its only-black usage. We at I.C. regret any inconvenience this may have imposed.

Print Shop Driver: Epson LQ-500/800 - Now, you can finally use the newer 24-pin printers, with *Print Shop* and the *Print Shop Companion!* Works with any 24-pin printer that is compatible with the Epson LQ-500 or LQ-800, which includes the Panasonic 1124, Star NX-2400, and many others!

Price: $14.95 for each Print Shop Driver. Dealer, Distributor, and User Group inquires welcome! Add $2.00 shipping/handling (Canada/Mexico $4, All others $6). Innovative Concepts (I.C.), 31172 Shawn Drive, Warren, MI 48093 USA, Phone: (313) 293-0730 CompuServe: 76004,1764

CN SPECIAL

Detroit World of Atari

Sig Hartmann Tells All--Dave Small Demos First 'Mac' Laptop

Vidi-ST Grabs TV Frames And Much of Show's Attention

by Dennis P. McGuire

The World of Atari Show in Dearborn, Michigan on June 24th and 25th, gave strong indications that Atari is back for 1989! The stage setting for this event was first class: The Hyatt-Regency Hotel in Dearborn, just up the road from the Ford Motor Company World Headquarters.

Atari Corporation

The Atari booths, one for ST products and the other for 8-bit products, were at the center of the exhibit hall. 8-bitters may take some comfort in the fact that both booths were the same size, despite the fact that the show was sponsored by ST World magazine.

Atari's STacy laptop ST and the Portfolio hand-held MS-DOS computers were the hit of the show. The STacy had apparently suffered from an encounter with a disgruntled baggage handler on the way to the show. The case was damaged and it was repaired in the wee hours of the morning by David and Sandy Small to make it presentable for the show. In return, Sig Hartmann, gentleman that he is, allowed them to display the STacy in the Gadgets by Small booth running the Spectre 128 GCR. According to David, this is the first time that the premier Macintosh emulator for the ST was actually run on the laptop model. If Gadgets by Small and Atari both meet their announced shipping dates, the STacy/Spectre 128 GCR combination will be the first true Macintosh compatible laptop computer to hit the market, and by far the least expensive!

The demonstration model STacy, although a prototype, had a very finished appearance. According to Chris Roberts, Atari's new user group coordinator, the only "non-production" aspects of the demo model were the grayish black color, the dual floppy disk drives, and the LCD monitor screen. The production model will be a slightly lighter color, have a back-lit super-twist LCD screen, and come standard with a single 720K floppy at a list price of $1495. An optional 20 meg hard drive model will carry a list price of $1995. The STacy has ALL of the ST's I/O capabilities including the MIDI, cartridge, mouse, and external monitor ports. While the built-in LCD display is monochrome, a color monitor can be connected to the external jack. The range of estimates that I heard on the overall weight of the STacy, and how long it will operate before recharging varied so much that, I suggest the first thing a STacy owner do, is weigh it, run the batteries down, and let us all know! As for availability, Sig Hartmann said if it was not out by September, he might be!

Even if you have read about the Portfolio, seeing it in person has quite an impact. It redefines the term "portable computer." Running MS-DOS, with its own built-in word processor, Lotus compatible spreadsheet, and appointment calendar software, it should be very popular with business people who travel. A small ROM card port is available for additional software. There is also a port for connecting the Portfolio directly to an MS-DOS machine for high-speed file transfers. While technical specs were not available, this appears to be a true parallel port. One important feature which was "missing" was any provision for a modem. The Portfolio does not have an RS-232 port. With the extremely small size and low power consumption of the "pocket" 1200 baud modems (Migent, for example), I think it would have been wise to build one in. The keyboard, while obviously not typewriter quality, was not bad considering the trade-offs made to compactness. I felt that I could get used to using it, but then I don't have any fingernails! Approximately 100 pre-production Portfolios have been distributed to Atari executives.

Shipping Dates

Sig Hartmann's talk on "The Future of Atari" was a highlight of the show. His courtesy, respect, and sincere interest in Atari computer users make him an excellent spokesman for the company. He indicated that Atari sales were expected to exceed $500 million for 1989 and that they currently employ 1800 people worldwide. Planned shipping dates for the STacy, Portfolio, and the Lynx (portable video game system) are September. The TT 68030 machine will be available by the end of the year in two versions, one TOS compatible, and one UNIX. The ATW has been delivered to developers in Europe, but will not be available in the U.S until mid-1990 when appropriate technical support staff have been added.

Approximately 500 Atari CD-ROM drives have been delivered to developers. List price for the CD-ROM drive will be $599, but a release date has not been set. Sig would like to see more software

available on CD-ROM before the hardware reaches production.

When asked about the widely rumored "ST Plus" or "EST--Enhanced ST" with improved graphics and sound capabilities, Sig deferred to Atari's new policy of not announcing products unless they can be shipped in 90 days. He did acknowledge that it was an active development project.

The Atari 8-bit booth included the XE version of MIDI-MAZE, and AtariWriter 80 running in 80 columns on the XEP-80.

Atari also distributed free copies of the 1987 edition of the International ST Software catalog. This 700-page book is well-organized and thorough. I can't help but wonder why we never saw it before! I hope it is being updated.

Software

Most of the major ST software houses had exhibits. Codehead, Imagen, Michtron, Sierra, Softrek, Gribnif, Migraph, Abacus, Intersect, Gadgets by Small, Seymor-Radix, and Darek Mihocka/Ignac Kolenko were all well-represented. While many of these firms had new releases of their well-known programs available, there was not a lot that was totally new.

The most significant software news seemed to be the *BeckerCAD ST* program from Germany introduced by Abacus. From the brief look I had at it, *BeckerCAD ST* seems to be very competitive in performance with the other computer-aided drafting programs for the ST, and a bargain at the special introductory price. It includes both GDOS and Postscript output. I'll look forward to doing an in-depth review.

Codehead introduced their widely anticipated *Utilities* disk. Charles Johnson and John Eidsvoog have a reputation for providing high quality, useful software for the ST at reasonable prices. The *Utilities* disk follows in the tradition of *G+ Plus, MultiDesk, Hot Wire,* and the recently released *Midi-Max*. It includes *Art Gallery 2.0, Multifile, Font Tricks 2.0,* and others. These guys continue to amaze me with their incredible insight on the type of software products ST users need, the ease of use of their software, and its absolutely "bullet-proof" performance.

Imagen showed their widely respected *UltraScript* driver software which brings Postscript compatibility to the budget-priced Atari SLM804 Laser Printer. They also introduced new versions of *UltraScript* for the Hewlett-Packard DeskJet, and popular dot matrix printers. I gave a sample of the *UltraScript* dot matrix output to a local desktop publishing expert, and he couldn't believe it was done on a 9-pin dot matrix printer!

Michtron has licensed *UltraScript* from Imagen and bundled it with *Fleet Street Publisher 2.0* as the "Deluxe" version. Since it already had Postscript output, this makes addition makes Fleet Street a much more appealing DTP package. Michtron also promoted Tim Purves' new multi-line *Michtron BBS 3.0* and the *Tempus II* high-speed text editor.

Softrek showed version 1.57 of *Turbo ST*. This popular text display accelerator has been improved considerably. It now also speeds up graphics output and is even faster than before! Since the show, *Turbo ST* version 1.6 has been released.

Gribnif demonstrated *Neodesk* 2.04 which now includes support for the Moniterm monitors and takes up 20K less RAM.

Intersect offered "show special" prices on *Interlink* and *Revolver*. *Masterlink* should be released soon since advance orders were being accepted.

Accustar had a rather inconspicuous corner booth along with an announcement of a new game called *Winger*. While I am not a game freak, I was impressed by what I saw. These guys should make some more noise so more people will know what they've got!

Migraph offered hands-on demonstrations of *Touch-Up 1.5* with their hand-held digitizing scanner. This package is a virtual necessity for doing serious desktop publishing on the ST.

Darek Mihocka and Ignac Kolenko gave a technical seminar on Sunday covering the ST Xformer (Atari 8-bit emulator), and their *Quick* series of utilities. *ST Xformer 2.5* is now XE compatible, supports extended RAM, and "hard disk size" virtual drives, runs on a 520 ST, but no longer includes the original 800 operating system option. The *Quick* programs are a set of very useful utilities being distributed as shareware. *Quick ST* performs text display speed-up, *Quick Index* benchmarks your ST's performance, and *Q View* is a file scanning program.

Hardware

The Vidi-ST was the most impressive piece of hardware shown. This is a true video frame grabber. It interfaces any composite video source (camera, VCR, cable TV) to the ST through the cartridge port. The number of frames it can store is limited only by RAM. Individual frames can be saved, edited and integrated into animation sequences. Vidi-ST is manufactured in Scotland, and is being distributed by Computer Games + and the CHAOS user group.

Seymor-Radix introduced the DVT VCR(Digital Video Tape) hard disk back-up system. This software/hardware combination allows backing up a hard disk on standard video tape. It includes a cartridge which provides a composite video output which you connect to a VCR. The current software only performs file by file backups, and requires about an hour for a 20 meg hard disk. This allows about 120 meg to be stored on a T-120 VHS tape. The next version of the software will also have an option for image backups which will be done at a rate of about 1 meg per minute and allow 360 meg per tape.

I've included Gadgets by Small in the hardware section because the big news there is the Spectre GCR interface which allows standard ST drives to read AND write Macintosh disks. Deliveries are still expected to start in August. Dave is working on version 2.0 of the Spectre 128 software. He also mentioned that someone is working on an Apple-Talk interface for the ST, and that if the hardware works, he will try to incorporate software support into a future version of Spectre. The brief demonstration of the Spectre 128 GCR running on the STacy laptop was an exciting first. Atari and GBS could pull a real marketing coup by setting up a formal demonstration and calling a press conference for the national computing press (Infoworld, Byte, etc.)!

ICD offered their well-known line of 8-bit and ST products, but did not show anything new. Their MIO interface for the 8-bits is back in production, and they dropped a few hints that they may bring out a new product for the 8-bits but were not specific.

Jim Allen's FAST Technologies demonstrated their Turbo-16 accelerator board. The 32K RAM cache is the primary reason why the Turbo-16 outclasses the less expensive 16mz boards. Jim is also working on a 68030 board for the ST. Like many of the best ST goodies, this product will be for Europe only, since there is a patched version of TOS over there which supports the 68030.

Technical Seminars

The technical seminars were well-attended, well-presented, and well-received. Sig Hartmann's talk on "The Future of Atari," and David Small's on the Spectrum GCR drew the largest crowds. Dorothy Brumleve's session on "Computers and Kids" was probably the most novel topic. The GOS operating system, presented by Alan Reeve, was the only 8-bit presentation. A "National User Group Forum" sounded potentially exciting, but, unfortunately, fell through.

Etc.

The principal dealers/distributors present were Rite-Way of Warren, Michigan, Cal-Com from Silver Spring, Maryland, 1st Stop Computer Systems of Dayton, Ohio, and Best Electronics from California. Best Electronics showed the first non-Atari mouse I have seen available for the ST.

Innovative Concepts displayed their 8-bit products which included their EasyScan II digitizing scanner, and a modification kit to allow 720K 3.5" drives to be used with the XF551.

Reeve Software exhibited the GOS Graphical Operating System for the 8-bits and offered it as a package which included a genuine Atari ST mouse. GOS has undergone progressive refinement, and appears ready to be packaged with the XE computers (Are you listening, Atari?).

My compliments to Rich Tsukiji and ST World magazine for putting on a first class event. It's clear that Atari owners are looking for more! I'd recommend a PA system, more publicity, and better planning of the technical sessions for future shows. There are so many things happening at these shows that it's difficult to give in-depth coverage in a reasonable length article.

Time to RENEW?

Check your mailing label. If it shows an **8909**, this September issue of CN is your last! Send in your renewal ASAP. If it shows **8910** or **8911**, your renewal will soon end. Please Renew Early!

WHITMAN MUSIC

STARR NX 1000 Printer MAC AND IBM COMPATIBLE--$165.
ATARI 1040 STFM MONO or COLOR-BEST SYSTEM PRICE-$$$

HARD DRIVE and 5.25 floppy in same case from $595.

FREE MIDI cables & SOFTWARE with purchase of keyboard	*no. of keys and size*	*Price*
CASIO PMP-300 Pro, sampled sounds, 4 timbres, pcm sampled drums, built in speaker only	49 full sz.	$259
CASIO PMP-400 Pro, features same as above	61 full sz.	$349
CASIO PMP-500 stereo, recorder, 465 snds	61 full sz.	$449
CASIO HT 700 synth w/free cartridge ($69. value)	49 mini sz.	$199
CASIO HZ 600 P.D. synth w/free cart. ($69. value)	61 full sz.	$379
CASIO CZ-1 touch sensitive w/free carts. ($179 value)	61 full sz.	$599
CASIO FZ-1 sampler with upgrd. 25 disks ($3000 list)	61 full sz.	$1595
AKIA X7000 SAMPLER 1.5 MEG MEM. 12 bit 36khz	61 full sz.	$650
KAWAI K-1 256 Sampled snds. 16 voice great w/ST	61 full sz.	$795
KORG M-1 FANTASTIC MIDI workstation sampl. snds.	61 full sz.	$1995
KURZWEIL K-1000 or EGP finest piano snd. 24 voices	76 full sz.	$1995
PROPHET 2000 sampler with 25 disks 12 bit	61 full sz.	$995
EMU PROTEUS rack module 32 voices, sampled snds,		$895

SONUS "SUPERSCORE" BEST BUY Scoring Sequencing sftwr. $199
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Turn Your Atari into a Macintosh™

Spectre GCR

The Newest, Most Powerful Macintosh Emulator Available for Atari Computers

COMPATIBILITY :
- Reads and Writes Macintosh format disks with an Atari Disk Drive
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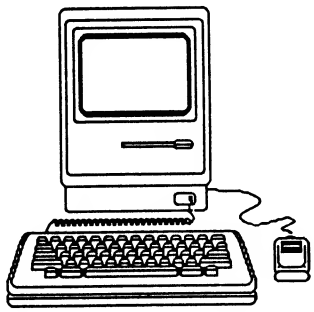
- Hard Disk Compatible

Developed by David Small, the creator of the Spectre 128™



SPEED :
- GCR allows you to "plug and play" with Macintosh Disks in real time; no need to copy Mac Disks to Spectre Format
- The screen is 30% larger, and the overall speed of the Spectre is 20% faster than the Mac Plus

Suggested Retail : $ 299.95

Gadgets by Small, Inc.

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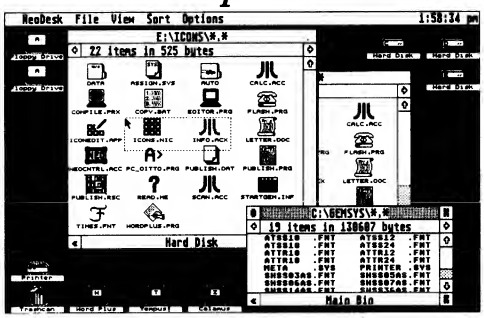

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Hacking Memories

By: David Small

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Hacking Memories

Lots of people say the good-old-days of hacking are over. Steve Levy's book "Hackers" (highly recommended! Even has a long section on the Atari 8-bit, and John Harris of *Jawbreakers* / *Frogger* fame), has an epilogue entitled "The Last True Hacker", about Richard Stallman (of the Free Software Foundation, a.k.a., GNU).

And Rick Cook (wrote Wizard's Bane, now on the shelves, required reading of any SF oriented hacker!) wrote (of me) on the BIX network, saying, "Dave's one of the last wild-eyed hackers left."

All I can think of is, sheeeeesh! This is egotism at its *worst*, here's people saying that because they lived through the Good Old Days, the stuff going on right now isn't really Hacking. You know, *true* Hacking, complete with an upturned nose. This is the equivalent of, "When / was a small boy, I had to walk five miles to school, barefoot, through blizzards, uphill both ways."

Foo! (A pause for a definition. "Hacking" is not breaking into bank computers, et al, as the word is commonly used in the mass media. Hacking is simply "pushing the envelope" and is not restricted to computers at all; there's hackers of all occupations and hobbies. Goddard was a rocket hacker, Scholz a guitar and analog electronics hacker, and so forth. I have to put this same paragraph in every time I use the word "hacker" so people don't think I'm talking about WarGames and the Internet virus.)

Anyway. I'm also kind of tired of people bragging about what they did with 8 whopping K in a PDP-8 (or whatever it is), and sneering about the megabyte memory machines today, as if the challenges aren't just as great. I've got some news for them. Hacking isn't even *slightly* a group of geriatrics sitting in a rest home, cackling about MIT's artificial intelligence lab and the 60's. Hacking ain't dead at all; it's alive and well.

As for today's hackers, envelope pushers ...

☆ Jez (Jeremy) San is a very very good programmer and hacker. He did some quiet genius in *Star-Glider II*. He made a disk that boots, and works, on BOTH the Amiga and Atari ST. One program for two machines--and that program is written in ultra-optimized 68000 assembler language.

This is unbelievable. Completely different machines, architectures, different video schemes, different disk drives--and this guy makes ONE disk that boots and runs on both machines.

Apparently, now the "double boot" format is being used all over Europe.

I'd love to work with Jez San. I met him a while back when Sandy and I went to England, and still stay in touch; he spends the money for transatlantic phone bills to dial into BIX. (!)

☆ I just got a copy of the Union Demo from Europe for the ST. It's free; get a copy. It's well worth the download time. In software, the writers *override* the hardware horizontal and vertical blanking signals sent to the monitor. This lets them put up graphics on all borders of the monitor picture, instead of having the usual black border. (It's something about changing the NTSC/PAL bit at the exact microsecond when the display-enable line would ordinarily shut off the monitor, and involves counting every cycle since vertical blank--incredibly difficult). Oh, yes, this was done in assembly language.

☆ Charles Johnson and John Eidsvoog at Codehead continue to hack the ST's operating system beyond belief. (And as their T- shirt says, "We Speak Assembly." I guess I *am* a bit biased towards assembler, huh?) They casually write a GDOS that's superb, a desk accessory stretcher, a hot-key program starter ... all "impossible" stuff. I keep getting blown away by them. I'd love to work with them too.

☆ My hacking, *Magic Sac* / *Spectre 128* and now the *GCR*, is pretty well accepted now--even MacZealots have heard about it, and grudgingly admit that it does work-and it's my honest gut-feel that I'll do a *SideKick* to the world ("Completely changes the way I use my machine") with *HyperWeb*, which is now gathering so much steam in my mind that it's interfering with the final touches on *GCR*. I keep forcing myself not to write to you about *HyperWeb* until it's published and out the door and blowing minds. *HyperWeb* is a trademark of Gadgets by Small, though ...

So this is not an article about the good old long-lost days of hacking. This is just some fun memories I have.

So Get On With It, Dave

Okay, okay.

I went to senior high at a place called **** ****. (Note: School's names have been deleted to protect the very guilty.) We used a teletype, and dialed into a time-share system called "Hewey," an Hewlett-Packard (of course) 2000C computer.

The HP system was a very nice hack. Using two minicomputers, HP 2114 and 2116 units, it managed to support up to 32 users at the same time. This is very much not trivial. Just to date me (I'm 31), it used *drum* memory for swap space, and

64K byte core memory for main storage. The New Hot 2000F system used a 5 megabyte removable disk pack--you know, the ones two feet in diameter? (Remember them?)

Of course, you learn to do all the computer will let you do FIRST, before hacking. So I went through the HP manuals, which are just as bad as ST or UNIX manuals are today, and learned HP Basic; there was no other language, nor editor, available. Then, I sent off to Cupertino for HP 2100 assembler manuals.

I knew some Basic, but became expert with HP Basic. I learned the intricate ASSIGN statement, and even kept up on new system calls HP was introducing--say, the PRO() function, that prevented a user from BREAK'ing out of a program. (Like CTRL-C). I did all this at the expense of school work, which I found to be a howling bore, and graduated with a 2.6 GPA. (oops.)

But look. Say that YOU had a class in American History, pre-Civil War, taught by a guilt-ridden prof who spent all but two days on the Noble American Indians, and how we oppressed them? You know ... one day on 3 billion years of the planet, Columbus, the American Revolution, THEN an eon on the Noble Savages, and THEN one day at the end, Indians through the Civil War. I still can't look at a Noble Savage painting without shuddering.

Now, would YOU look at this ASR-33 Teletype terminal and start thinking hacking thoughts? The terminal was fast. 10 characters per second. I bumped it to 11 characters per second, which the TTY-33 will handle, even if it sounds a little funny doing it. (12, nope.) This is also known as 110 baud and is why all the telecommunication programs in the world now have to support an idiotically slow speed--some poor person might still have a TTY.

Mass Storage was a hard disk (!) down at the computer's headquarters. Three fourths of this hard disk, perhaps maybe 20 megabytes, was fenced off due sheerly to politics. The administrator was trying to get a bigger hard disk, and thus restricted users down to very little storage space so they would complain, and he could buy a bigger one.

My personal mass storage was paper tapes. These were fun. You'd punch them out, and at the end of the day, gather up the little punchlets and throw them in someone's hair. For some reason, static cling made them stay there until semester's end, no matter what. To this day I have paper tapes in my "memories" box, and I get a warm fuzzy feeling staring at them. Sandy wants me to throw them out. Ho, ho.

I also bought a MAG TAPE (!!) for $21 from 3-M and had the system operators actually write my stuff onto it. It took probably five feet of tape on a 2,400 foot reel, but wow, what a feeling!

Merry Christmas All!

Well, I noticed one day (funny how these stories all start like that) that the ASR-33 was "auto-answer," just like a modem can auto answer. In fact, if you dialed into the teletype, it would switch itself on clear out of the blue. Of course Western Union Teletypes would have to be able to do this for their original (TELEX) purpose. And gee, a Control-D, "End of Transmission," would kick the teletype right back off. (In fact, line noise did this to us a lot, until I finally rubber-banded the CTRL-D rod off the switch).

There was also a math class taught by "Jumpin' Jack" Myslik in the room with the teletype, much to the irritation of us hackers. So I went over to teletype #2, in the Middle School, one day before Christmas Break, and plotted.

Jack was teaching his class. In the corner, the teletype sat, turned off. Suddenly, it turned itself on, without anyone touching it. With a cheerful (no other word for it) ringing of its bell, it spat the paper up, typed up, "Merry Christmas, All !!!, signed, Hewey the Computer"--and turned the teletype right back off.

Even in those days, I'd learned to cover myself. A middle school teacher and I laughed ourselves silly as I fed the paper tape into the terminal that had called the main school teletype. I figured if a teacher who was watching me approved, AND it was Christmas good-will-towards-man season, not too much could happen to me. Oddly enough, I was right. (Haven't been too right on the good-will stuff since then, though.) Jack took it remarkably well. The reaction of the class was "stunned," I was told.

The HP Experts

Soon, I explored around in the world of the HP. Why, there was a system library there filled with neat stuff, and the same names over and over in the source code, from whom I learned most of all I know.

These people who ran the HP, the operators, Phil Tubb and John Ridges, were brilliant. I don't have other words for them. They went on to form ALF, as in music and 68000 co-processor boards for the Apple II, then a highly successful disk duplicating business. John Ridges is absolutely the best programmer I have ever met, HackerCon or no, and a top hardware designer. (Even Dan Moore, no slouch, unhesitatingly says John is the best.) And John has a personality on top of all that, something sadly missing in many topflight computer people.

Well, I found a program, which led to announcements, which led me to ... turns out they'd formed a "user group," the Jefferson County Computer Club (JCCC or J3C), and had meetings monthly. I started attending, and found out a lot.

They ran a bulletin board system on the HP, and it was really good. I got into my first online discussions. They taught a class in HP assembler; they even persuaded the system manager to bring the system down Saturday mornings for people to try their assembler programs. (They could not run under time-shared Basic; remember, this system ONLY had BASIC, no editor, no assembler, etc.).

So, they wrote an assembler for

the HP in BASIC (!), and had it output machine language on paper tape. Ah, a problem: ASR-33 terminals always used even parity, and punched the 8th bit even parity, which played merry hell with machine code. No problem, said John Ridges. His assembler produced a *second* paper tape that masked the parity bit correctly; you'd line up the two tapes, one on the other, run them through the tape reader off line with the punch turned on, and produce a new paper tape that was correct assembler, eighth bit and all. A typical John Hack.

John also wrote the first program I have never understood, no matter how hard I tried, MLTCOM. MultiComm let up to 16 people talk to each other at once and was an incredible hack for an HP, which was not designed for inter-terminal communications at all, period.

My First HP Assembler

So I wrote my first HP assembler program; it rippled the front panel lights back and forth in a ping-pong manner. You know:

```
            move.w    #1,d0
again:      move.w    #16-1,d1
;
leftloop:   move.w    d0,lights
            rol.w     #1,d0
            dbf       d1,leftloop
;
            move.w    #16-1,d1
rightloop:  move.w    d0,lights
            ror.w     #1,d0
            dbf       d1,rightloop
;
            bra       again
            end
```

There. If you don't understand it, go learn 68000 assembler, and I will have done you a major favor. You will *like* it. (Even if 8088 assembler has traumatized you, 68000 is really good.)

So, I (trembling) brought it over on Saturday, and surprise!, it didn't work. Tim Gill, another member/founder of the user group, sat down with me to try and debug it. He "toggled" through the program, displaying it on the front panel a word (16 LED's) at a time. He had never seen the source code to the program before, by the way. He toggled through the program, saw it on the 16 LED's.

"Oho!," he said. "Common mistake. Let's see." He flipped switches, pressed a few LOAD buttons, changed the program slightly, and it ran, rippling the lights back and forth. Tim, you see, knew HP assembler by heart, sort of as a hobby!!

Tim is good, very good. He went on to form Quark, which did hard disks for the Apple II and Mac for awhile, and now does *Quark X*press*, a stunning desktop publishing program for the Mac and Mac II which is busy gaining fast and worrying Aldus Corp. As I recall, InfoWorld reported not too long ago that Quark sold some old word processing code to Claris for a clean million dollars ...

I repeat, this was the DENVER computer user's group, not the BAY AREA HomeBrew computer user's group, not the one everyone talks about and hypes and mourns the good-old-days about.

Thinking back to high school, the time at the J3C was the best I ever had as a teen. All in all, the teenage years were a miserable time for me, and you couldn't pay me enough to go relive them.

Hacking Mischief

I suppose it was inevitable, given the push-the-envelope mentality of people like this, that I adopted their attitude, and started to hack the HP system. These people were my *heroes*; they wrote programs I could not even understand.

Now let me explain something about crashing the system. Crashing it, as such, is TOTALLY irrelevant. The *neat* thing is thinking your way around the geniuses at HP who designed the system security, and thus proving yourself to be ahead of them. I admit it, and frown if you like, but I did drop the HP system once ... and, sigh, I learned my lesson. By the way, I was ultra-careful not to damage any files; I just stopped the system.

I mean, it was neat and everything that I had thought of a way, but I couldn't dial into HEWEY anymore! No bulletin board, none of my files handy, nothing. The lesson struck home in that half hour before John rebooted the system off paper tape: Crashing's A Bore. When I told them, John and crew couldn't really have cared less about anything except the hack, which they promptly reported to HP, which HP then ignored, forever as far as I know. But I did gain slightly in my hero's eyes; I was becoming a hacker, and freely exchanging information.

We learned the ever-fun System Slowdown program. The idea is, when 32 people are talking to the computer at once, it swaps back and forth between them really quickly, faking everyone into thinking they have exclusive use of the system. So you have a "time slice," 1/32 of total time, when you're talking to the CPU. What you do was write a program that used up 98% of the time slice, with two ASSIGN statements, then added a statement that forced the CPU to keep you around longer than it wanted to (ENTER, if I recall). Run this on about 3 or 4 terminals, and the system would halt for everyone else, staying focused on the few terminals.

Again, we did this once, and told John about it. Neat, he said. Never once did he even have to say, don't do it again--it was implied. After we figured out the hack, it was on to bigger and better things.

More Hacking Fun

I wrote a Basic interpreter in Basic, more or less on a dare from John, that would actually run HP BASIC, albeit very slowly. But it did let you debug and trace and neat stuff.

I hacked HP Star Trek to let you save the game, then restore it, so you didn't lose your position between game-plays (when Jack

Myslik would kick you out of the room). I learned to hate unstructured code. (This, from Dave Small? True, true; I have debugged horrible messes in HP Basic, and know enough to write good Basic these days.)

Something else... For the first time in my life, I felt the urge to *create* something. Many were the nights I sat with the HP Assembler and Basic books, and created something new. I don't know how to tell you in words how important this was to an eleventh grade hacker in high school. It was something I did well at a time I needed to do something well.

Some of it was necessary. For instance, we had a problem with one dweeb at our school deleting our files, which had no security on them. So I named a file "0O0O0O" (oh's and zero's), which the ASR-33 prints darn near identically, and he couldn't figure out why he couldn't delete a file named six-zeros. He he.

Some was fun. My brother Jim did a "Gunner" game (remember? enter elevation in degrees and amount of powder, and it gives you back how far it fired and how much you missed by?) that I entered into HP Basic, and which, to my pride-and-joy, the system hackers put into the main library.

I got a hold of a new, hot widget on loan: A Hazeltine 2000. This was a whopping 300 baud terminal, really blazing speed for me. It had *screen addressing*--you could move the cursor anywhere! In short order, I whipped out a Lunar Lander program with graphics for the Hazeltine.

(By the way, when I later went to college, my knowledge of Basic and graphics stood me in excellent stead. I darn near flunked out first year, but I learned **The Secret of College--Independent Study**. Find a willing prof, study something you want to lear more than anything (say, for instance, CDC 6600 assembler), and get an 'A' for having a world of fun. Or study the ARP 2600 synthesizer and produce a two minute demo tape, complete with a sound effect at the end, whose duplicate is on every Spectre disk sold as the secret dedication page, and get another 'A.' I survived college, graduating with a 2.0001 or so GPA because of these.)

And so we came down to the biggest event of my senior year. We hackers at my high school *challenged* the system hackers to a Trivia Bowl about the HP.

The Trivia Bowl

They accepted and were *excellent* sports, even hacking up some hardware for "answer" buzzers so the first one to push a buzzer switch locked everyone else out, supplying the IC's and hardware and switches. Phil Tubb agreed to moderate; I felt cold chills as I settled into my chair, along with others, and looked across the room at the likes of John Ridges and Tim Gill. Behind both teams were ASR-33's, hooked into Hewey, and we positively bristled with reference manuals and listings we might need.

We'd agreed to make up questions for the other team. Mine was first. "What are the first names of Hewlett and Packard?" The room broke into smiles, which set the tone for the evening. Buzz. Tim Gill. "Bill Hewlett, Dave Packard." (Tim went to work for HP before Quark.)

Our turn. "How many holes are in 38.7 feet of punch tape?" Out came the calculators, as the stopwatch ticked by. Inevitably, the answer came down to a fraction of a punch, and we missed the question.

We thundered back with ASSIGN statement trivia ("How many programs can run a two-ASSIGN-then-ENTER loop before the system locks up?"). Back even. And so forth.

Coming into the Final Tie-Breaker, it was close. We'd agreed the final question was worth many points, enough to win it either way. Phil asked both teams, "Calculate, to the precision of two hundred digits, the value of 2 / 41457." (note, that number might not be right, it's been a long time.)

I thought with a sinking feeling of writing a division emulator--you know, long division? Carry the digit, subtract, multiply... Tim Gill was *already* at their terminal, entering a program he was thinking up, line by line. I sat sweating, working out the algorithm on paper that Tim was working in his mind.

Their terminal began to go blip (pause) blip (pause) blip, printing out the answer, very slowly. And a memory struck home. Tim Gill's super-calculator program DIV. I had a printout of it. It did infinite-digit precision (just tell it how many) calculations. And it was short.

I pulled the listing from my pack and had my team read it to me. Already, in those days, I could easily out-type the ASR-33 terminal at 10 characters per second (well, 11, grin, you bet we sped it up! This was a *hacker* trivia bowl contest.) In a few minutes, it was punched in, and we started it running. The terminal started banging out the answer, chatter-chatter-chatter, no hesitation at all between digits.

The system hacker team had passed the 150th digit when Tim's own program, on our terminal, finished the 200th digit. We won.

Afterwards, Tim, shaking his head, admitted he'd just plain forgotten about his infinite digit math program--after all, it had just been a short hack for him.

Nothing, absolutely nothing, I ever did in high school even comes *close* to comparing to the moments of that Trivia Bowl, when myself and my comrades bested the best with their own infinite precision DIV program. It was one of the finest moments in my life.

And somewhere downstairs, in a box labelled "Don't You Dare Throw This Out," are the old, quietly yellowing printouts and papertape of the HP 2000C system, of the first things I ever created on a computer.

HACKING LIVES!

See you next month!

CN SPECIAL

Atari in Israel

High Prices & Software Are Problems

By Milt Creighton

We have heard for years how well Atari is doing in Europe, and especially in the UK and Germany. There have been occasional reports from Italy, Spain, and France where the ST machines have made some inroads, but still lack significant market penetration. But what about the Mideast? Very little has been written about Atari in Israel, for example. I recently had an opportunity to visit Tel Aviv and had several hours of free time which I decided to use looking for an Atari dealer.

Let Your Feet Do the Walking

The Israeli phone company has its own version of the yellow pages for tourists and it is in English. (They call it the Golden Pages.) There is an entry for computers, but under that are the names of individual establishments. No brand names are listed! It looked like an impossible task.

I decided to take a walk down some of the major commercial and business thoroughfares. I walked up Ben Yehuda for nearly two miles without spotting a single computer store, though further investigation revealed I had somehow walked right by one establishment. The problem is that, except for department stores in the more affluent sections, most Israeli stores are small, more like shops. Many carry a wide variety of merchandise and it is possible to miss a computer store that also sells cameras and stereo equipment.

Turning east from Ben Yehuda I walked several blocks and then turned south to walk down Dizengoff. Nothing. I came to the southern terminus of Dizengoff without finding a single computer store, though there were any number of sidewalk cafes selling all manner of delectible goods. The journey south down Dizengoff took considerably longer than had the trek north up Ben Yehuda. I had just decided to call it quits when I spotted a shopping mall at the end of Dizengoff and, on a whim, went inside.

Shopping malls are pretty much the same everywhere. Most of them have an information booth and I went looking for one. I found it with little difficulty and approached the young lady who sat there between two guards carrying submachine guns.

No NRA, But....

In case you didn't know, all Israeli youngsters (with a few exceptions for medical or religious reasons) serve a three-year tour in the armed forces upon graduation from high school. Yes, that means the young women are drafted too. It is a common sight in Tel Aviv, and all over Israel for that matter, to see eighteen and nineteen-year olds going home carrying their weapons and several clips of live ammunition --the girls, too. No one pays them the slightest attention except for the tourists. It turned out the young men with the guns at the information booth weren't guards after all. They were just visiting a friend.

I got the information I wanted. There was a computer store in the mall and it was right around the corner. I found it without difficulty because they had a poster-sized picture of the Atari Fuji symbol in the window! The only computer store I had found in three hours of looking turned out to sell Atari products! I marched inside and asked for a clerk.

More Price Than Power

The young man I spoke with informed me that the store sold 520ST, 1040ST, and Mega machines and could get most other Atari products. The store was small--about the size of the area you stand in to order a Big Mac at MacDonalds. They sold several brands of computers besides Atari and I asked the clerk how Atari sold compared to the other brands. He told me that they sold a good many 520ST machines with double-sided drives, but very few of the other models. I asked him why that was and he replied it was because there was little software available for the ST other than games and the other Atari models were just too expensive compared to the IBM clones.

An Atari 520ST with a double-sided drive and NO monitor sells for 1900 new shekels. That's about $1075 at the current rate of exchange. You can get a decent IBM clone for about 1500 shekels (about $850) and there is quite a lot of professional software available.

At first I thought he meant there was little software in Hebrew for the Atari machines--especially since the store demo model had Hebrew characters taped to the keys. But he said professional software in English would sell almost as well since nearly everyone in Israel speaks at least some English. The problem is they just can't get it. Their distributor stocks very little Atari software since there is so little demand. It turns out to be a catch 22 in microcosm similar to what we have had until recently in the US: the machine base is just too small to build the demand for software, and hardware sales are limited by the lack of software. What software they do get is at least six months old, but even that is not their major problem at present.

Some Software Doesn't Work

Their major problem is that a lot of game software that used to work on their ST machines no longer

does. They have no explanation for it and have been unable to get assistance from anyone. They suspect some of their problems may be traceable to the new double-sided drive in the new ST machines. It seems a lot of European games are sold on extended format single-sided disks and the new drives seem to be incapable of reading the additional tracks. It may also be that they have compatibility problems between old and new versions of TOS, though the salesman didn't seem to think that was the case. Whatever the cause, it is seriously affecting their ability to sell Atari products.

The salesman appeared to be well-informed about Atari products in general, though he had not heard of the new products announced in Hannover in March. He was well aware of *pc ditto* and the *Spectre* 128, but had not heard of *pc ditto II* or the *Spectre GCR* cartridge due out soon. He was interested in hearing about them, but not overly so since he doubted they would be able to get either product in less than six months from the time they became available in the US, if at all.

Still A Game Machine

In general, Atari's ability to penetrate the Israeli computer market is probably limited. Few businessmen buy the machine, and in Tel Aviv at least, Atari still equates with game machine--and one plagued with problems at that. Since the market is small and is already well represented with IBM clones, it is probably not worth Atari's effort to rescue the situation. Indeed, many of the problems could be addressed by the dealers and user groups. Direct order of products from the US instead of going through a distributer would solve the six-month time lag and pd software in Hebrew could fill the software gap. Neither of those solutions look likely to happen so, Atari will probably continue to limp along in Israel. If the squeaky wheel gets the grease, the clamor from the US Atari community will probably drown out the complaints of the few Atari owners in Tel Aviv.

Atari in Australia

The following two articles are reprinted from the Australian Atari Gazette, April 1989. They both cover Jack Tramiel's appearance at PC89 in Sydney Australia.

Atari honcho reveals OZ game plan

by Derril Farrar

Short in stature but very big on performance, Atari boss Jack Tramiel--who turned the US company around after he bought it in 1984--arrived in Sydney last week to open PC89, vowing to make a few changes here, too.

"We intend to be number one in the Australian pc market in two years," he said last week.

In fairness, however, Tramiel qualified this by saying he was talking about pcs "as bought by individuals."

"The Australian people using computers are very knowledgeable, far more so than in the US. That's why we intend launching a lot of new products here in Australia as well as in other countries," he said.

Tramiel said that in five years, pcs "with all the power in the world" would be selling for at least $300, and the 'simple' ones for $99.95. "Anything under $100 will be sold through the mass markets, through the department stores," he said.

Referring to an earlier product which Atari launched, Tramiel said that when it first went on the market at $595, it sold 30,000 a month.

"Then we dropped its price to $299, and the product sold at 100,000 a month," he said. "When we offered it at $199, it sold 400,000. In other words, we adopted a policy of sell to the *masses*, not the *classes*.

The statement, with both words rhyming in the American vernacular, caused a ripple.

"That policy," Tramiel said, "worked then. It still works today."

Why then, he was asked, did some people still go for the more expensive machines--ones that really didn't do any more, or do it any better? "Some people" he shrugged, "just like to pay."

On Big Blue, he said: "IBM compatibles are like cigarettes. They're bad for your health--but a lot of people use them. Mind you," he added hastily, "if they want 'em, we'll still sell 'em."

(Reprinted from Computing Australia 20th March 1989.)

PC89: Atari chief urges more choices

by Maggie Macrae

Known for his alternative views on the direction of the PC market, Tramiel also believes in the literal meaning of personal computer--a computer for individuals. This viewpoint goes against the development of the PC through the 1980s by both vendors and users, but Tramiel is not concerned.

..."Personal computers are computers for individuals," he said. "We at Atari are going to stick with that rather than try to compete with IBM and its competitors. Most people, especially vendors, take PCs too seriously. They are used for fun and must be fun to use. The business market is full of standards and marketing hype. Vendors should put technology as their first priority, giving customers the best technology they can and the business success will follow."

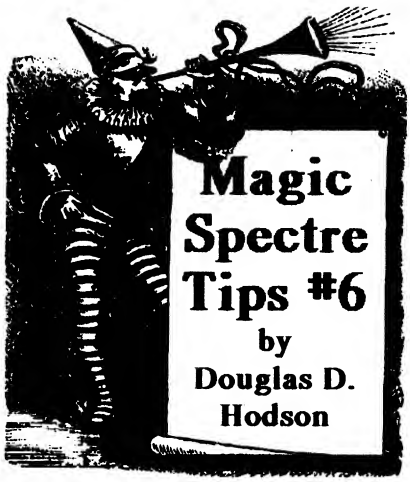
"Most vendors are not prepared to take risks, because the business community doesn't like change. Smaller PC companies are prepared to take risks and individuals are more prepared to accept change. This is what is slowing down the adoption of many of today's PC innovations. Most PC companies are not innovators. They are copiers. Atari is not into copying. We are into uniqueness.

"Standardising of users is wrong. What users want is a rounded education in all aspects of personal computing on all platforms. They want to have alternatives.

"Users also want competitive pricing and our pricing structure reflects that. Atari has the philosophny that its products are affordable for the masses, not the classes."

"Today PCs are for all aspects of life--home, work, entertainment and education--and most vendors forget this."

(Reprinted from Computerworld 17th March 1989.)



Mac Resources, Part 1

In this and in the following couple of months I will be covering a topic that is foreign to most Mac and Spectre users. The topic is hard to discuss without at least a basic understanding of how Mac programs are created. This topic presents a problem to me as well. You see, Apple does not release solid information on this topic. This makes it hard for me to gain a good understanding, much less write about it. So much for the sob story. I feel the information presented here and in the following months will be useful to a large percentage of Spectre users. In the end I hope even the novice Spectre user will gain enough information to customize Mac applications for his own use! So what's the topic?

Resources?

A common tool used by programmers in the Atari world is the resource editor. Laser C and Mark Williams include resource editors as an aid for designing dialog boxes, icons, menus, and other elements used for "on screen" display. As the name implies, a resource editor generates a resource file. This file contains much of the information required to display the graphic elements that were drawn while in the editor. Filenames for resource files on the ST typically have an extension of RSC.

An example resource would be if you were to design (sometimes called "draw") a dialog box in the resource editor. The dialog box is given a name which translates into a number that is used as a reference point in your programming code. After the resource file has been generated (i.e. compiled and saved), the program only needs to perform a few steps to display the dialog box "up on screen" by using the reference name. In simple terms, most of the information that is used to make the screen look the way it does is contained in the resource file.

What is ResEdit?

As you may have guessed, ResEdit performs precisely the same tasks on the Mac as the resource editors for the ST. ResEdit allows you to edit Mac resources. There are several resource editors available, but ResEdit seems to be the most popular. So popular in fact, it is included with almost every programming package sold for the Macintosh. ResEdit can be found on most Mac bulletin board services, GENIE and, of course, in the Current Notes library. We will also discuss other programs very useful in manipulating and obtaining information about Mac resources such as, REdit, RMaker, ResTools, ResReview, ResList, RDecompiler and others I may obtain in the meantime.

Why Use a Resource Editor?

After all this discussion of interest to programmers, a good question to ask might be, "Why does a non-programmer ever need to use a resource editor?" The simple fact is, if you're a novice Mac user, you don't! I never used one (except for programming) until recently. Most of my "real" Mac friends never used one. But there was this one person, he's a real Mac guru. You know the type, everything has to be done on the Mac, wouldn't settle for anything less. From the looks of his office, I would guess he's bought most every piece of Mac software written. In short, a Mac-oholic. He is NOT a Mac programmer; he IS a Mac user. He DOES use it! Why?

He didn't like the placement of MacWrite's opening window, so he changed it. He didn't like the looks of some dialog boxes, so he changed them. He didn't like the appearance of his icons, he didn't like the defaults of several programs, in fact he changed so much I began to wonder if it was a Mac anymore. He even changed how the windows worked! How did he do all this?

After spending more than several hours reading everything that could be found about Mac resources, the more intrigued I became. The more I read, the more "hidden" power I find. I hope this and the next several columns will enlighten Spectre users. Now, on with the show.

Resource Forks

All Macintosh applications, whether public domain, shareware, or commercially purchased, consist of two separate forks: a data fork and a resource fork. The data fork is the programming code that makes the application do what it is supposed to do. The resource fork controls what you actually see on screen. Example resources would include fonts, menus, icons, dialog boxes and many more. The programming code in the data fork "calls up" these resources to perform the interaction between you and the program.

You cannot and should not attempt to change the information contained in the data fork. If you do, the program would almost certainly crash. As for the resource fork.... well, this information can be altered if you exercise some degree of caution.

Working With ResEdit

First and foremost, NEVER use ResEdit on anything other than a backup copy of your application! This raises the next question where

is the ST equivalent Mac resource (RSC) file? It turns out that Mac resources are included or linked in with the actual programming code. In fact, to describe the situation precisely, you might say the programming code is a resource all by itself in the resource file. Don't get confused yet, there's more to come!

Hard Drives Off!

We need to set up a disk for experimenting. Create a fresh startup disk containing the System, Finder and ResEdit files. Remove all the fonts and desk accessories from the System file using the Font/DA Mover. I'm using Finder 6.0, System 4.2 and ResEdit Version 1.1b3. Reboot the Mac using this new startup disk. Next we want to rebuild the Finder file. Hold down the Control and Alternate keys while double clicking on the Finder icon. Continue holding until a message is displayed asking whether you wish to rebuild or not. Answer yes (why I want you to rebuilt the Finder will be explained later). If you're a hard disk user, create a startup disk and restart your system with your hard disk off! ResEdit plays with the guts of application programs. We don't need unpleasant surprises!

First, A Tease

I need this section to get you up and experimenting with ResEdit, and give you a taste of its power. After booting the new startup disk, start ResEdit. ResEdit will load and display all the files available for editing. Notice the file called Desktop. The desktop file is normally hidden from the users' view. It contains information relevant for displaying the desktop. Double click on the desktop file to open it. Another window is opened to display all of the file's resources. Feeling confident? But what are all those 4 letter words. (You may have some 4 letter words of your own if you mess this up.) They are abbreviated resource names. For example, the abbreviation for icons is ICN#, do you see it? Now you know where all those

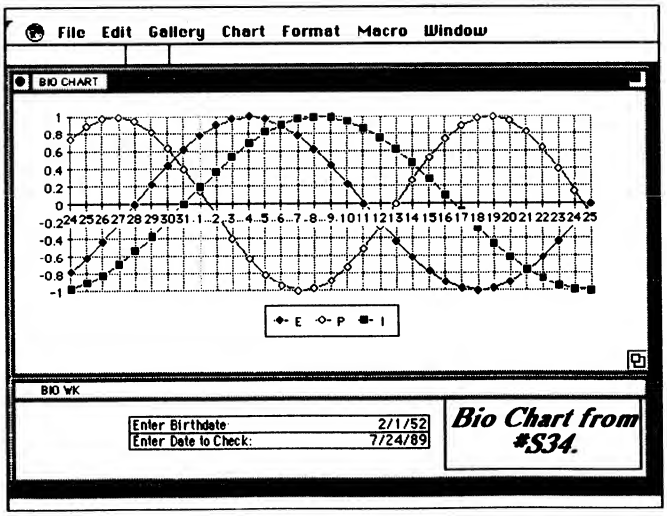
NEW SPECTRE CN LIBRARY DISKS

by Jeff Greenblatt

Here are this month's 5 new PD and Shareware Spectre compatible (128K ROMs) library disks. For those of you using the Spectre with 64K ROMs, I recommend the excellent CN Magic library listed elsewhere. If you like and use any of the files, don't forget to make your shareware donation(s) to the author(s).

#S32: VideoWorks w/Sound, contains 6 VideoWorks animations that also produce sound when played. The disk comes with a VW player, sound resources, and MacinTalk. The animations are 1 Mac "to go," Apollo, Marbles, People Wall, ShortStop, and The Cauldron.

#S33D, HyperUtilities #2:, contains 13 utilities for use with HyperCard. They are GetString XFCN, HyperScrap, LockField, PluckString XFCN, Recover, Script Lister, ScriptAccess, Stack Analyzer, Stak-X Demo, Unity, Virus Encyclopedia, XFCN miscellany, and Zoomer XCFN.



#S34, Excel Templates #1, contains 29 assorted files for use with Excel. They are Macro, Amort Sch, Apod 1.9, Budget, Checkbook, Clock.CH, Clock.MS, Clock.WS, Commands, DB.Form, Excel Budget, Expenses, Exps, Inc, IRA, IRA Doc, Load Calc Master2, Load Max Time 2, Matrix, MortAmt.MS 3.0, Read me first, Readme.load calc, Replace, Savings Account, Bio Chart, Bio WK, Biorhythm, Read me Bio, WN/Read me Bio.

#S35D, HyperStacks #3, contains 5 new stacks for use with HyperCard or SuperCard. They are Atoms, Bird Stack II, Helicopter Stack, HyperIRA, Read me HyperIRA, and Scan Stack 3.

#S36, Sounds #4, contains assorted sounds for use with SoundMaster (on CN disk S17) and a file that will change the system beep to other kinds of sounds. The disk contains A Wish, I don't know, I know you are, Mecca jumbi, Need Input!, Unacceptable, Ax Headroom, CheapBeep, CheepBeep Doc, Ayaaaaah!, Boom! aoooh, game over man, monkey, and vulcan mind.

fancy icons for the desktop are kept. Double click on ICN#. Another window opens to display all the contents of the icon resource. I bet those icons look very familiar. Double clicking on the icon once again displays the icon in all its glory, allowing you to edit and see the ID number associated with it (remember the reference number we talked about earlier?). Go ahead and edit it. Mess it all up. I like to put the words ST all over the place, and Spectre wherever I find room. Now close all the windows except the original window that is displaying all the files. At some point, ResEdit will ask you whether you wish to save the changes. Answer yes. Now your "new" icon will be displayed in place of the old! Getting interested yet?

I Didn't Know You Could Do That!

If you quit ResEdit to check out your new icon, restart it for another example. Open the Finder file located inside the System Folder. Again, a list of Finder resources is displayed. Notice all the abbreviated resource names are in alphabetical order. Scroll down to the one called "LAYO" which stands for LAYOUT, as in desktop Layout. Open LAYO and the resource within LAYO (should be called something like "LAYO ID = 128"). Let's stop right here for some explanation of exactly what you just did.

You scrolled now to LAYO. What you did was scroll through a list of all the resources the file contained. A better description would be to say, you just scrolled through a list of the different resource TYPES your file contains. As mentioned earlier, a resource describes a graphic element used "on screen" to interact with the user. Each resource TYPE contains information stored in some predefined format that describes some graphic entity. How's that for muddy waters; but it really is the only way to describe it. A resource is information stored in some predefined format. You could say the resource "TYPE" is a template for how the information is stored.

So what if you have several resources of the same TYPE? If several resources of the same type exist, then ResEdit will group them together under one name, that name being the type of resource. When you double click on that name, another window opens to display all the individual resources of that TYPE! You, in fact, just did that! You opened all the resources of TYPE LAYO and found only one existed (called "LAYO ID = 128"). Go open the resources of TYPE "STR#." You will see a list of all the string resources!

Ok, to finish the example, go back to where "LAY0 ID = 128" was opened. Now you are viewing the information contained in that resource. Scroll down to where it says "Always grid drags" and change the selection from 0 (FALSE) to 1 (TRUE) if it hasn't already been done. Save the file by closing the windows. Now files on the desktop can only be placed on an imaginary grid. Just try moving your files around on the desktop and you'll see the effect. There are several other options to "tweak" if you so desire. Try changing the "Icon Horizontal Spacing" to a larger number to keep your desktop icons separated better. Note: Use the "Clean Up Window" selection under Special to reorganize the desktop to new settings quickly.

Known Mac Resources

To finish off this month, here's a list of several Mac resource types and a short description of what each contains. Keep this list handy for the next several columns. We are going to learn a great deal about the Mac! I promise enough information to make a "real" Mac user envious.

MAC Resource Types

Type	Description
'PAT '	QuickDraw pattern
'PAT#'	Pattern list
'ICON'	Icon
'ICN#'	Icon list
'PICT'	QuickDraw picture
'CODE'	Code segment
'PACK'	Package
'FREF'	Finder file reference
'BNDL'	Finder bundle
'DRVR'	I/O driver (including desk acc)
'TEXT'	Any text
'STR '	Pascal-format string
'STR#'	String list
'INIT'	Initialization resource (including keyboard configurations)
'FONT'	Font
'NFNT'	Non-menu font
'FWID'	Font width table
'FRSV'	Reserved font list
'CURS'	Cursor
'FKEY'	Low-level keyboard routine
'WIND'	Window template
'MENU'	Menu
'MBAR'	Menu bar
'CNTL'	Control template
'ALRT'	Alert template
'DLOG'	Dialog template
'DITL'	Dialog or alert item list
'MACS'	Macintosh system autograph
'FOND'	Font family definition
'WDEF'	Window definition function
'MDEF'	Menu definition function
'CDEF'	Control definition function
'LDEF'	List definition procedure
'PDEF'	Printing code
'PREC'	Print record
'SERD'	Serial driver
'INTL'	International localization res.
'DSAT'	"Dire straits" alert table
'CACH'	Ram cache code
'FMTR'	Disk formatting code
'PTCH'	System patch code
'ROvr'	ROM override code
'ROv#'	ROM override list
'APPL'	Finder application table
'FDIR'	Finder directory
'FOBJ'	Finder object
'FCMT'	Finder comment
'LAYO'	Finder folder layout
'MINI'	MiniFinder resource
'FBTN'	File button (MiniFinder)
'NBPC'	Name-Binding Protocol Code (AppleTalk)
'PAPA'	Printer Access Protocol Address (AppleTalk)
'RDEV'	Remote device (Chooser)
'PRER'	Printer remote (Chooser)
'PRES'	Printer serial (Chooser)
'SIZE'	Partition size (Switcher)
'TMPL'	Res type template (ResEdit)

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THE MARSHALL ARTIST

This month: A discussion about the trials and tribulations of designing and marketing a computer game for the Atari ST.

by Steve Marshall

I just got home from vacation faced with a ton of catch-up work and suddenly realized that my deadline for this month's column was already upon me. Sometimes it hardly seems worth going on vacation (although we had a really great time!). By the way, I have received some letters from readers with some suggestions for future columns. Thanks for your support and I promise to tackle some of these topics in future installments.

My First Game

My first commercial computer game (*Lost Dutchman Mine*, co-written with David Lindsley of Magnetic Images) is finally out on the market after nearly a year of hard work. To say it has been a learning experience would be an understatement. It has been well received but we are quickly learning that marketing a game (and making a profit on our effort) is another story entirely. While anyone (well, maybe not anyone) can write a computer game, getting it packaged and into the stores can be a far more formidible effort.

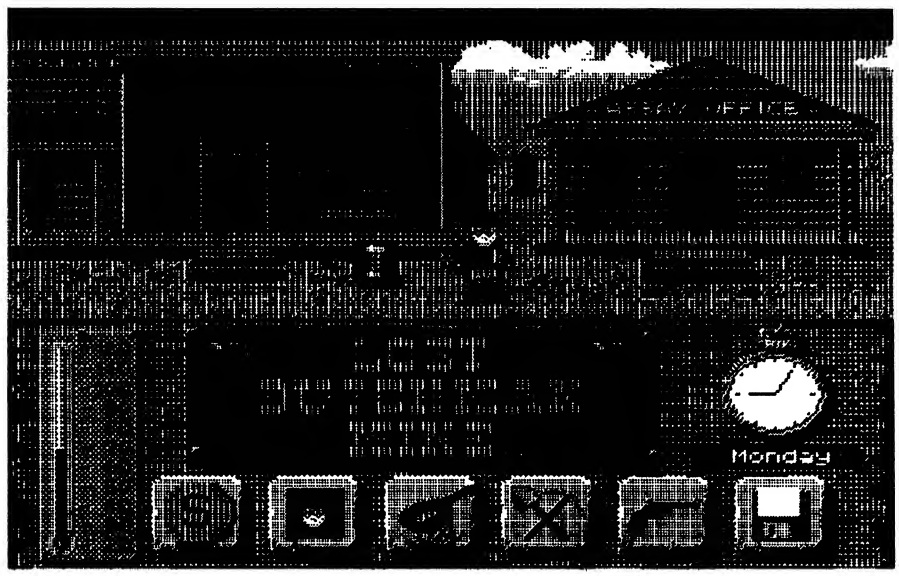
A Little History

David and I have been friends for a long time, having first met at a local Atari users' group meeting. We found we had a number of interests in common, primarily programming and computer graphics. Shortly after that, David started his own business (initially called Font Factory), designing and marketing a series of font disks for use with *Publishing Partner*, which had just hit the market. I determined that the burgeoning desktop publishing market needed some quality clip art so I decided to create a series of high resolution clip art disks. David took on the marketing effort, creating the packaging and setting up a national distribution network.

The font disks and clip art did well, fulfilling a need in the ST market, and we got an excellent response from satisfied users; but we decided to expand the company by getting into the computer game arena. *Gold of the Realm* was our first effort and was a learning experience for all of us. While *Gold of the Realm* was a good game, we made a lot of mistakes in the marketing end. We decided to try and learn from those mistakes and come up with a game worthy of our efforts.

Reality--What a Concept

I was given the task of coming up with the game conception. We felt the game market was saturated with space and dungeon adventures, so we resolved to try and come up with something different. We wanted a game that would be fun to play, have attractive graphics, a game that could be played over and over, and most importantly, the kind of game we would enjoy playing ourselves. We also wanted a game that would be easy to learn but still have enough challenge to hold the player's interest. (While some experienced gamers relish playing for months solving obscure puzzles, I have a low tolerance and get frustrated easily.) We decided to take advantage of our location in Arizona and design a game with an Old West theme. The result was *Lost Dutchman Mine*.



One of the most famous legends in history is the story of Jacob Waltz who, supposedly, discovered a fabulous gold mine but died in 1891 without revealing its location. The player controls an old prospector whose goal it is to find the legendary *Lost Dutchman Mine*. The game starts in an old mining town called Goldfield where the player can buy supplies, get ore assayed, get patched up by the doctor, buy burros, sleep or even play poker with the town gambler. There are also over 120 mines and caves to explore, a river to fish in or pan for gold. Goldfield actually existed in the late 1800's at the base of the Superstition Mountains east of Phoenix, and we made a trip out there to view the ruins. We wanted the game to have as much realism as possible but be fun to play. So the game is played in "real time" with day and night, temperature that reflects the desert climate, stores that close at 6:00 pm, a variety of food items with different nutrition values and much more. We also added robbers, Indians and rattlesnakes for challenge.

Getting The Bugs Out

Once we came up with the basic premise, the details of game play fell into place within a couple of weeks. And within three months, we had the game 95% completed and ready for final beta testing. In many ways this was the hardest part of the creative process. Game play was modified as we found things that didn't work as we had visualized and added other details like digitized sound, midi music and the unending touchup of the graphics. Talented friends like Dave Thorson, Tim Hunkler and Ken Baadertsher (also responsible for Atari's TOS 1.4) aided our efforts to streamline the code and enhance the game. Debugging was a three month nightmare as we went through revision after revision, with each minor bug fix seemingly creating two new ones. Finally, eight months after we started, we were satisfied that *Lost Dutchman Mine* was ready to release.

But we had learned from *Gold of the Realm* that some things had to be done before a game could be successfully released. Advertising is expensive but essential and many magazines require ads to be in three to four months prior to publishing. We wanted the ads to appear just prior to the actual release of the game so timing had to be carefully planned. We sent out ads to several ST magazines, planning on an April release. Another important means of publicizing a new game are the magazine reviews. But reviewers are leery of beta copies so we really had to wait until we had a rock solid version of the game that would stand up to a critical review. Once again there is a delay of at least four months (and sometimes much longer) between sending out review copies and getting reviews in print. While it would seem ideal to hold off on releasing a game until all of the reviews are published, it is very difficult to sit on a completed project for 3 to 6 months (especially when there are bills to be paid).

To Market, To Market...

We have found that marketing our own products is an unusual situation in the computer game business. It is far more common for the big companies (like Electronic Arts or Epyx) to buy the rights to games written by any number of smaller software houses (in addition to writing their own). But we opted to keep control of the game and try to market it ourselves. The biggest problem facing a small company like **Magnetic Images** is getting the product accepted by the major distributors. Without commitments from distributors, software companies have little hope of reaching the hundreds of retailers across the country. But distributors are reluctant to deal with small companies. They worry about buying an unproven product, they worry about support and they worry about being stuck with unsold games when these small companies go belly up (which is not an uncommon occurrence). It's perfectly understandable from their point of view in wanting to minimize their risk and deal only with proven, reputable companies, but it makes breaking into this group virtually impossible.

The Piracy Problem

Another problem we ran into was one we were expecting but still dreading. I'm referring to software piracy. We knew it was a problem but were still disappointed when copies of *Gold of the Realm* were on pirate boards within 48 hours of the first release. Copy protection is a big headache (and costly) and after our experience hardly seems to slow down the pirates. We decided not to copy-protect *Lost Dutchman Mine* because we felt copy protection would not deter piracy and would unfairly penalize the legitimate buyer. In this way we were able to allow players of *Lost Dutchman Mine* to install the game on a hard drive, a feature appreciated by virtually everyone we've spoken to. But piracy is still a killer and it appears unlikely at this time that we will see a penny of profit from the ST version.

The Final Problem

Which brings me to the final problem (and perhaps the most significant). Both David and I love the Atari ST and all of our products were first developed on an ST. But as much as we love our ST's, the market is just too small to justify any further development. In talking to other developers, they have pretty much come to the same conclusion. At least, we have decided that no one can survive programming solely for the U.S. ST market. At a recent Computer Game Developer's Conference in Sunnyvale, CA., we learned that Atari represents the smal-

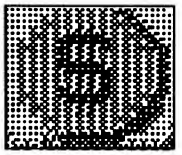
lest market in the U.S. while IBM dominates the computer game market (nearly 48% of all sales) as it does with every other market. For a game developer to survive, they have to program for the IBM. (This seems more than a little ironic when the IBM-types scoff at the ST as nothing but a "game machine.")

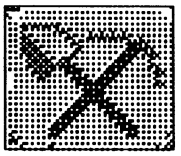
For that reason, we have contracted with a local programmer to write an Amiga version of *Lost Dutchman Mine* and recently contracted with a California company to port *Lost Dutchman Mine* and *Gold of the Realm* to the IBM. And, having learned our lessons the hard way, we have just contracted with a marketing firm in California to take over the marketing and distributing of all of our products, not only in the U.S. but in Europe as well. (We had tried to reach the European market ourselves but met with frustration as several companies took advantage of us and virtually stole thousands of dollars worth of product.) Hopefully, these moves, while expensive, will allow us to finally reach the entire market and allow us to see some financial return on our years of effort.

Still Dreaming Of Success

I asked David if he would have done anything differently if he had the opportunity, knowing what he knows now. His answer was yes; he would have not done his own marketing and he would not have developed solely for the ST. But we haven't admitted defeat yet and are beginning work on our next computer game. I can't say what it will be about but you can be sure it will be different.

It's still the dream of many people to achieve the kind of success that have made millionaires out of computer hackers. But that dream is becoming almost impossible to realize in today's computer world dominated by corporations and big business.





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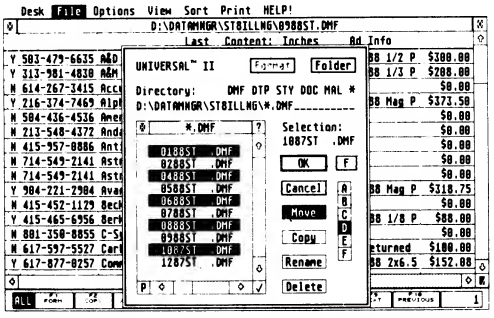

Shift/Click group operations are easy. Just hold down the shift key and select your files for any operation. You can also move up the folder tree by just clicking up the directory line. No more clicking out of each folder to go higher. Just select the superior folder and click on its name; it's that simple.

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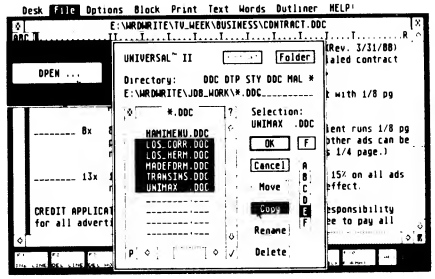
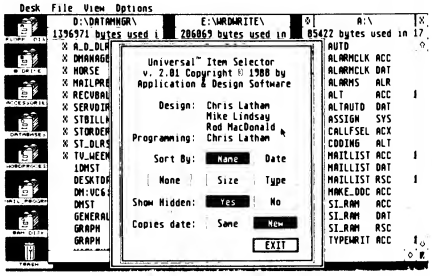


Rubberband group operations are possible with all "Action Buttons" featured on Universal. With verticle drive bar and path memory, you no longer have to type in drive path changes.



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Stuck in a Rut

by Sam Wright

Deja Vu II: Lost in Las Vegas

Not again! You had just cleared your name (not to mention remembered it) of Joey Siegel's murder back in Chicago and all you wanted was rest and relaxation, maybe taking on a missing cat case or catching a Bears game.

Well, it seems that Siegel had pilfered in excess of $112,000 from Las Vegas's infamous mobster, Tony Malone. Malone, not caring Siegel's dead, wants you to return his money. Or your life.

Deja Vu II: Lost in Las Vegas ($49.95) for the Atari ST is Mindscape's sequel to the popular *Deja Vu: A Nightmare Comes True*. Like *Deja Vu I* and Mindscape's other graphic-only adventures, *DVII* eliminates the need for typing. Instead, commands are selected through a command window via the mouse and used in conjunction with objects. For example, clicking "hit" and the moose (all right, it's really an elk) in your apartment will result in flogging a dead elk. If you want to pick up an object, simply drag it to your inventory window. To go to a certain place, double-click the location in either the picture window or the exits window. Easy as that!

Digitized sounds and voices, animation, and excellent first-person perspective pictures serve to enhance the game further. Believe me, your heart will race at *DVII's* denouement and then leap as you hear the all-too-familiar machine guns turn you into swiss cheese.

I wasn't able to back up the first disk of *DVII* with any of my copy utilities so I was forced to use the original (apparently with this game, Mindscape is using a new form of copy protection). Luckily, the first disk is used only to load the game. The second disk was copyable and was installable on my hard drive, like the other Mindscape adventures. Once loaded, the game then accesses only the second disk (or folder on your hard drive).

DVII is a tougher game than *DVI* or, in my opinion, the other Mindscape adventures (*Uninvited* and *Shadowgate*). Most everything is laid out on the table; you just have to figure out what to do with them. Or rather, what to do next. There will be times when you know what to do but just can't seem to phrase it correctly. My only advice in this case is to keep your patience, remain calm, and then rattle off a string of curses directed at the monitor. You'll feel better.

The following hints should be comprehensive enough to allow you to finish the game. Read them carefully; they may contain double meanings or meanings that won't become readily apparent until you've reached that point in the game. Also, take them with a grain of salt--as usual, I've included a few red herrings to frustrate you even more.

Before beginning, I'll leave you with one last hint about the end of the game. Once you've placed all of the evidence, get out FAST. Leave town in any way possible, in any transportation available. There are a set number of moves before the mobsters find out what has happened and then come after you. If you die, you'll find out how close you were to setting them up. At this point, you may have to begin again and decide just what would incriminate them (hope you saved the game beforehand).

Characters

Bum: Must be related to Stogie.
Cabby: What a friend! Six trips with nary a complaint.
Civilian: When he's a Harding.
Civilian (not): When he's a McMurphy.
Haggard old woman: She's harmless, but her purse isn't!
Hotel bouncer: Don't overstay your welcome. Use your time wisely.
Kowalski, Rudy: Here's someone you know!
Malone, Tony: His one weakness is getting too close to Ventini. You've got to convince him Ventini's nothing but trouble.
Martin, Stogie: Hot on your tail, as a good legman ought to be. Aside from his smart-aleck comments, he lets you know how much time you have left.
Ventini, Dan: Malone's nothing compared to him. This man's ruthless! You definitely don't want to be on his bad side. Just look at Stogie: he keeps switching sides.

Locations

Apartment (Bertha's): But it's a pleasant smell.
Apartment (Dan's): How 'bout those Bears?
Apartment (Sugar's): Your skills at breaking and entering have been well learned.
Apartment (yours): With those weapons, you'd think you were a private detective or something.
Bank (inside): Good idea, a $112,000 withdrawal from a bank account of $0.
Bank (outside): So that's what the skiing mask was for.

Casino (Joe's Bar): The slot machines keep eating your quarters. Better call for repairs.

Casino (Lucky Dice): Stick with blackjack and you'll win a couple chips. Keep playing and you'll inevitably lose. If only you knew someone ... still, you'll never get $112,000 this way.

Cemetery: If you play-tested the game, maybe you could get in.

Cobwebs: Now's not the time to be cleaning up.

Desert: Those tracks don't look human.

Hotel Offices: These give new meaning to the word "high-rise."

Joe's Bar: A back entrance is provided. Keys aren't always necessary.

Laundry Bin: One object is all it takes to make the thugs rethink icing you.

Morgue (inside): What happens when the bodies come in without big toes? The clerk would know what to do. Nevertheless, they all come in with some personal belongings (except poor Pierre Maloka).

Morgue (outside): "No civilians allowed, except dead ones." Two choices, one of which you'll end up in a week. When is a civilian not a civilian?

Police Station: They won't help you at all this time. Looks like you're on your own, kiddo.

Racetrack: The odds are five to one that Horseshoe Harry comes in the lead.

Reliant Laundry: Breaking in may be three times harder than being taken there.

Siegel's Office (inside): Open everything.

Siegel's Office (outside): One of the boards is loose.

Telephone Booth: A collect call to Tony Malone at Lucky Dice should liven things up a bit.

Train Stations: Don't waste your trips; you have little money and only have a week before it's lights out.

Wine Cellar: One of the bottles is loose.

Objects

In general, take everything you can and never discard it. You'll never know if that one object in Chicago will be useful in Las Vegas, for instance. Too, it may be of use more than once. Because your carrying capacity is quite large, you'll be able to hold more than several items at a time. However, when you can't carry anything else, you'll have to decide what to get rid of and what to keep. Just remember that this is real life: useless items will be useless in the adventure game. The chances of a genie appearing from one of your empty liquor bottles, for example, is minimal.

Finding one place to stash what you can't carry will allow you to keep track of everything. In Chicago, Cabby's taxi worked perfectly, allowing a nice central point for everything.

Be sure to search a place thoroughly. Examining and opening just about everything in the room should do it. There are many, many objects in *DVII* and just as many don't serve any purpose but to enhance the game's reality. However, those few objects that you will be needing can either be in plain sight or hidden.

Baggage claim check: Looks like you'll be returning to Las Vegas sooner than you thought.

Car (Ford): The nearest gas station would have a map.

Car (Mercedes): When a quick getaway is necessary, you can't wait all day for trains to Los Angeles.

Car (Volkswagen): Herbie goes to Las Vegas!

Cigar rings: They work better than fingerprints!

Dart: Is there anything that could substitute for one? Perhaps if the pencil were sharpened somehow? Or maybe the penknife. Or the letter opener. It's the real McCoy and it's got D.V. written all over it.

Diary: Incriminating evidence, to say the least!

Laundry (all): Yuck. You never know what's crawling around inside.

Laundry detergent: Now does it go in before or after the clothes?

Ledger: True or false? By exchanging it with the real one Ventini will get very, very nervous.

Magnetic button: It sticks to anything that moves up and down.

Newspaper: At $.25 it's a bit expensive for the 1940s. But the information is worth it.

Newspaper clipping: I wonder what he's doing nowadays.

Painting (Hotel Lobby): A hint of things to come?

Photograph: Quite intimate, eh?

Vacuum cleaner: Where do things go once they're sucked up?

Situations

All tied up: Is there anything with sharp edges lying around?

All tied up (after): Send the goons on a wild goose chase to get them off your tail. If they thought you escaped into the wild blue desert, that would keep them busy for awhile.

Wilton/McDonnel reenactment: Malone is too trustful and Ventini fears being caught. As for Stogie, he doesn't care whose side he's on as long as he's paid. Take all of this into consideration and use it to your advantage.

If you have any further questions or comments, I can be reached at P.O. Box 1853, North Springfield, Virginia 22151 (please enclose a self-dressed, stamped elephant) or via the CrossNet adventure conference, code #17380, led by node 4. If your local FoReM BBS isn't a member, ask your Sysop to add into it. I can also be contacted on Merlin's Litterbox at (703) 250-7303 (3/12/24/9600 HST bauds), node 146. It's PC Pursuitable through the Washington, D.C. area.

The Junkyard Pussycat

by John Barnes

The Underdog of the Month

The Junkyard Pussycat, being the kind of animal he is, often feels a certain kinship with underdogs. The underdog of the month for September 1989 is Deve Trehbiel, from Albuquerque, NM. Deve is trying to launch something called the "Software Users' Association" (SUA).

This echoes the theme I sounded in the May 1989 Current Notes. I named it "ACUTE" and called upon Atari users to unite to obtain better support from Atari Corp and third party developers.

Deve came up with his idea while he was President of AACE, the Albuquerque Atari Computer Enthusiasts. He visited the Fall 1986 Comdex in Las Vegas and talked with the likes of Sam Tramiel, Gordon Monnier, and Ken Waschham (executive director of the Software Publishers' Association). While these people were skeptical, Deve still sensed enough of a positive response to carry on.

SUA came to my attention through a prospectus that landed on the desk of Current Notes' ST editor. The prospectus outlines a fairly coherent approach to software reviewing that could, if it were successful, provide the marketplace with valuable data for making wise purchasing decisions. A review consists of the usual qualitative evaluation by a reviewer, a numerical score sheet, and the software publisher's response.

The prospectus describes SUA as a "cooperative." The members are individuals who pay annual dues, currently set at $20. The members are supposed to receive a quarterly publication called "CounterPoint, the SUA Quarterly." CounterPoint will be devoted to the reviews generated by qualified members of the SUA. At the present time, SUA has no paid members. The first issue of CounterPoint was scheduled for August 1989, but it looks like there will be a delay.

The prospectus covers a lot of ground. The scoring criteria for software are explored in considerable detail, there is a sample review (of *TextPro* from Abacus), and a "Reviewer Eligibility Application" is available for those who feel brave enough to act as reviewers.

Trehbiel feels strongly about piracy. At the present his main tools for combatting it appear to be education and research. He believes that an educated user will abjure "try before you buy" in the hope of receiving an indirect future benefit through increased availability of quality software. Research entails infiltrating pirate BBS's and documenting their misdeeds. Exactly how much good this will do in the face of apathy on the part of law enforcement officials, unwillingness to spend money on the part of publishers, and addiction on the part of users is unclear.

There is apparently no profit motive behind the SUA. That is a good thing because anyone who expects to make money on such a venture is deluding himself.

At the age of 30 or so Trehbiel has yet to face his first mid life crisis. He seems cheerful (and determined) enough in the face of apathy. He has an answer for every question that can be raised. Given that everyone is playing "wait and see" because they want to make sure they are going to get their magazine before they send in their money, will he have enough staying power? Can the ideas bounced off a few friends in a one horse town (Trehbiel's words) inflame the world of Atari?

Apathy is an old friend to me. My topic regarding ACUTE on GENie has not generated a single reply. Trehbiel at least put himself out in front of his cause, which I do not have the nerve (nor the time nor the freedom) to do. He has put a lot of effort into his phase I marketing campaign. I wish him well and hope that we can join forces some day.

Trehbiel and I each see problems with the other's approach. The community clearly needs more ideas, more workers, and more action to fashion a consensus and to provide itself with leverage.

I think a users' cooperative is too naive an approach. I envision ACUTE (Atari Computer Users' Technical Exchange) as a professional society that will advance the state of computing using Atari computers. This will require active participation by Atari, by developers, by publishers, and by committed users.

We cannot worry too much about whose "back pocket" we are in because, as I pointed out in May, our relationships within the community are truly symbiotic. A users' alliance needs credibility with Atari Corp, with developers, with the press, and with other users in order to be effective.

If independence is indeed a desirable goal, the ideal model for the Software Users' Association would

seem to be Consumers' Union, the publishers of Consumer Reports. CU was born in a different era and it has taken a very long time for them to achieve both credibility and support. SUA should perhaps try using its methods to put out something analogous to CU's Annual Buyers' Guide that can be marketed in stores or through users' groups. This would give SUA a measure of visibility and credibility as well as an income. If this product achieved a decent circulation publishers would come out of the woodwork to get their products listed.

If a publishing venture is to be a major part of SUA's activities, Mr. Trehbiel should get behind the scenes at one of the Atari journals to see what the facts of life are. As one who has followed the development of Current Notes from its infancy as a combined club newsletter through to its maturity as an independent commercial venture I can testify that things are not simple. One does not simply decide to put out a magazine.

Those who, in spite of all the caveats I have given above, would like to get on board with Mr. Trehbiel can contact him at The Software Users Association, 3721 Aztec Rd NE, Albuquerque, NM, 87110.

STACY - Who Needs It?

There is quite a lot of interest in a "laptop ST" or at least a convenient portable one. Atari Corp's STACY, announced at the Hannover show back in April, would appear to fill the bill for a machine that ST enthusiasts could tote along to catch up with their work on the road.

On a recent business trip to Denver I figured I would have a chance to catch up on some writing that I needed to get done for my job. I therefore decided to see what it felt like to take a computer along. I really didn't want to take along the monitor so I got hold of a *Videokey* from Practical Solutions in order to use the TV set in my hotel room as a monitor. I also decided to use *1st Word* (the original one that came with my 1040 ST back in 1986) because I could get away without a second disk drive and *1st Word* can be used in low resolution (which is, after all what we used on the 8-bits).

The 1040, while it does not fit into a briefcase, does fit into a medium sized suitcase along with the *Videokey,* a power strip, a few floppies, and a generous quantity of underwear for cushioning. I also packed a variety of cables and adapters that should allow me to connect to any TV set. The airline apparently did not care that a suitcase contained something that was out of the ordinary.

When I got to the hotel I found that their TV set was hooked up to a *Spectravision* (the Atari-containing system that allows interactive use of the TV to check out of your room). I called the engineering department and, after my contact had suspended his disbelief about using the TV as a computer monitor, I obtained permission to wire the ST in place of the cable box. The hotel engineer also asked me to PLEASE make sure the TV was reconnected when I left. The TV set's on/off switch was also controlled by the cable box, but that was just a matter of plugging the set into the power strip along with the ST and the *Videokey.*

When I sat down to do my word processing I found that medium resolution is not really *Videokey*'s forte. Low resolution was fine but I have lost the talent for word processing in this mode. I experimented with the colors a bit and I found that using solid blue rather than black as the background color improved things somewhat.

I was still faced with the fact that the TV set was about 2 1/2 feet above eye level, which was not a comfortable position for word processing. It wasn't all that bad, however, and I was able to bang out enough text to feel that I had gotten something done.

I really didn't miss the late news or the Today show.

I don't know what I would have done if I had needed hard copy. Perhaps I could have contacted a local Atari dealer to point me to the nearest user group. It would have been much easier to find someone to print the document out if my discs had been in MS-DOS format.

I will probably repeat this experiment, although I can certainly expect to find hotel rooms where, because of the way that the TV is chained in place, it will be impossible.

The STACY, which puts the display in the right place, will probably be more convenient. However, my experience with using a cursor on liquid crystal displays has been awful to date and I do not like the way they render text. I would have to spend an indecent amount of time on the road to justify ponying up 1600 or 2000 dollars for a portable machine and I suspect that only midgets would be able to use one on the usual tourist class tray table.

I do have a couple of applications where freedom from a wall socket would be extremely desirable, so I will give STACY a good look before I decide to buy any kind of a portable.

All in all, if you really are desperate to do word processing on a trip, you can probably get by the way I did. If you want a better ST solution to portable computing, try out the STACY when it appears in your local store (September?, October?...). I am told that a Macintosh laptop is not far away, but Mac users already seem to think their machines are portable judging from the number of the cunning little carry cases for Macs that one sees around airports.

Michtron's *Personal Finance Manager*

The field of home accounting programs for the Atari ST is presently dominated by *Pha$ar.* An initial very attractive entry by *Dollars and Sense* has faded away due to an unwillingness to fix bugs. *Managing Your*

Money, a very popular entry for the MS-DOS and Mac worlds has never made it to the ST, probably due to a lack of interest.

Personal Finance Manager, a new entry from Michtron, is accompanied by a lot of hype ("The World's Most Sophisticated Personal Finance Program" according to the advertising). The program, which can be found at retail for $31.95 (list $49.95), uses GEM windows to allow the user to enter debits and credits into a series of "accounts" and to generate a couple of different reports. The number of budget categories is restricted by the fact that they are single-letter codes. The mechanism for generating standard transactions (called "standing orders") is exceedingly awkward. There is no provision for automatic generation of transactions in account transfers. There is no linkage to any kind of tax accounting package. In short, *Personal Finance Manager* utterly lacks the capabilities that are required to track money through any household that has enough of it to worry about.

To claim that *Personal Finance Manager* is more sophisticated than *Pha$ar*, which has everything *Personal Finance Manager* lacks and a lot more, is, from my vantage point, ludicrous. *Pha$ar* uses a modest amount of artificial intelligence to make life easier for the home accountant. Default values are intelligently chosen. Any of the forty accounts that can be maintained is instantly accessible. On-screen help is always close at hand and is cleverly keyed to the current activity. A list of allowed entries can be brought up quickly. Once the initial setup has been made it is a joy to work through account reconciliations, budgeting, or taxes.

Personal Finance Manager has a distinct British accent, probably from the Elephant and Castle district of London. It looks like it was written as a programming exercise in the use of dialogue boxes and windows rather than as a serious tool for handling money.

Michtron could have saved itself a lot of time, effort, and bad publicity by simply ignoring this program.

Tempus2

Michtron does, however, deserve kudos for bringing us *Tempus II*. As my colleague Andrzej Wrotniak has pointed out, this product is the finest program editor to be found anywhere. This release clears away many of the objections that we had with the earlier version. *Tempus2* is much more polite about using memory, taking only what it needs instead of the WHOLE THING. New menu selections have been offered that eliminate the need to go chasing after the silly little desktop icons that represent open files.

The ability to customize the keyboard operations is nothing short of fantastic. Word wrap capabilities have been added, but I do not feel the need to use this program as a word processor.

I did, however, get a rude surprise when I tried to use the "\" key. It seems that this is on a different, extra, key on European ST keyboards. After a bit of rummaging around I found out how to make the "\" come out in the right place, but I would have appreciated it if Michtron had done this for me.

Macro operations have been greatly improved and the ability to set column limits on the search and replace functions is a useful addition.

Tempus II is somewhat more expensive than the earlier version was but it is well worth the price. I have no knowledge of any upgrade policy for registered owners of *Tempus I*, but I wouldn't necessarily expect to find that there is one.

Whither Michtron?

The entire Atari community keeps a close eye on Michtron, Inc. As both an early entry and a durable one, they have achieved considerable prominence. Events like the falling out over GFA BASIC, the recent connection with MicroDeal, and their stated desire to penetrate other markets seem to indicate sea changes. Past comments by Gordon Monnier, Michtron's President, seem to indicate a certain lack of satisfaction with the ST market.

Unfortunately, when it comes to using their products, Michtron does not enjoy such a good reputation. I am not into games so I cannot comment on that component of their business. In the area of utility programs and productivity software, however, I have yet to purchase a Michtron product that gives complete satisfaction. This has led to a certain sales resistance. I am not alone in this.

It seems to me that a company with the product base that Michtron has could take a little more effort to ascertain just what it is they are marketing. Even a dynamite product like *Tempus II* got messed up because they failed to appreciate that the differences between the U.S. market and the European one could be important. It did not take me more than a few minutes to decide that *Personal Finance Manager* was useless to me. I have to wonder whether anyone at Michtron ever took it out of the package.

C'mon Michtron, perhaps you can fool some of the people all of the time, but it will catch up with you in the end.

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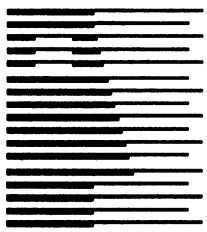


BLOCK

by Richard Gunter

Shopping II: Worth a Look

Suppose you're looking for a first computer, some enlightened soul has suggested a look at the Atari ST line, and you haven't fallen into the IBM compatibility trap. What's to look at?

Quite a lot, actually. (After all, this is an Atari-oriented publication, isn't it)?

The Computers: 1040 ST

A megabyte (1024K) of memory, sound (three voices), keyboard, and floppy disk drive made as a single unit. Comes with a mouse, which is required.

The mouse is a little box with two switches on top, a cable connecting it to the computer, and a little ball in its bottom that rotates as you move it. The computer follows the mouse's motion with a pointer on the screen. The floppy disk drive is a 3.5" unit, using small disks with hard plastic cases.

Although the 520ST (half the memory) is still available, I'd recommend at least a 1040ST for most applications -- the extra memory has enough flexibility to run a serious application with enough room left over for several handy desk accessories.

Mega 2 and Mega 4

(At this writing) the flagships of the ST line. Made in a different configuration: keyboard connected to a separate box which contains the computer and a floppy disk drive. Only real difference between them is memory and cost, with 2 megabytes of RAM in the Mega 2, 4 in the Mega 4. The Megas are equipped with a device called a *blitter,* which makes the display work a bit smoother and faster.

Monitors

Two standard monitors for all ST models: the monochrome monitor delivers a high resolution black on white display with shades of gray. The color monitor provides two sorts of color display. Color is nearly essential for games, art, and the like. Monochrome is better for some business applications.

Printers

Nearly any printer will work with any of the STs. Decision factors are print quality and cost.

Least expensive are the 9-pin dot matrix printers (Near Letter Quality). Next are the 24-pin dot matrix printers (Letter Quality). At the top of the heap are laser printers (Near Typeset Quality), capable of terrific quality print, and sporting hefty price tags.

Dot matrix printers all work pretty much the same way: the mechanism slaps an inked ribbon with a set of thin wires arranged in a vertical row, "painting" the letters with tiny dots as the print head moves horizontally. 24-pin printers achieve better print quality with more and smaller wires. The laser printers don't use a ribbon, but make dots too (about 300 per inch).

An unusual variant is the ink jet printer, which sprays tiny ink dots directly on the paper. These can achieve quality rivaling most laser printers, at lower cost and somewhat less speed.

Disk Drives

A second floppy drive allows the computer to reach both programs and data simultaneously. A hard disk drive does something similar, but more so, making lots of programs and data available instantly. Down side of the hard drive is cost. Figure on several hundred dollars at least.

The Software

Here's where the fun really starts. One needs to decide what sort of software one wants, then which software, which brings us hot and heavy into the requirements business again. Let's take a quick survey of some common applications and the sort of hardware they need.

Games

Games are certainly a legitimate use for a home machine, even if the boss won't go for the idea at work...

Most games require one floppy drive, some will work a little better with two. The vast majority of games work best (or only) in color, so if you're interested in games, you should plan on a color monitor. Most games will play on anything from a 520ST to a Mega 4.

Word Processing

The most popular application for any home computer. In a nutshell, word processing software turns your computer into a super typewriter with a permanent memory, a pair of scissors, and a glue pot.

Your documents can be saved on disk so you can print an original at any time; and you can edit, rewrite, and cut and paste to your heart's content.

There are several good word processors available for the ST, ranging in price from free to a couple hundred dollars. If you're new to word processing, shop around, perhaps try a few to determine which one is likely to be the most comfortable for you. Don't trust your friends' recommendations too much; personal tastes can be pretty idiosyncratic.

The 520ST should handle most word processors, and the 1040ST can run any of them easily. You'll find two floppy drives to be a near necessity. If you plan to do much word processing, or want one of the more powerful products, a hard disk drive may be worth the investment.

Desktop Publishing

A relatively new sort of application finally within reach of home users, desktop publishing software allows you to mingle text and graphics on the printed page in rather fancy and professional ways. This publication is an example of what can be done.

I know of four desktop publishing products for the ST, covering an impressive range of price and capability.

If you're considering desktop publishing, go for a Mega 2 or 4; all desktop publishing programs are memory hogs. They can use all the memory they get their little electronic fingers on and ask for more. A good 24-pin printer is the minimum, but these programs can really show off with a laser or ink jet printer!

A monochrome monitor will allow you to see more of your page without "scrolling," although the color monitor is a viable compromise with all but one (*Calamus*). Don't even *think* of getting into desktop publishing without a hard drive.

Spreadsheets

Spreadsheet programs have sold a lot of computers. A "spreadsheet" is simply a rectangular array of text and numbers, i.e., data arranged in rows and columns. Spreadsheet programs allow you to build such things and manipulate them automatically. Their uses are limited only by the capacity of your computer, and your creativity.

There are a few freeware and shareware programs available, and a couple of professional products capable of using Lotus 1-2-3 spreadsheets.

Spreadsheets can eat up memory quickly; the 1040ST is probably the minimum for anything really serious, and a second floppy drive or hard drive is advisable. You can get by with a color monitor.

Database Programs

A database is more than just a file containing information; it's a structured collection of related information, which is used with a Database Management System (DBMS). A good DBMS can sort, search, select, and report on the data in highly sophisticated ways.

The Dbase line of products has dominated the IBM PC world for years. At least one Dbase "workalike" is available for the ST computers, and there are several alternate choices, including freeware.

Again, a second floppy drive or hard drive is indicated. For display requirements, you'll have to check.

Telecommunications

Add a modem and telecommunications software and you're ready to have your computer dial up an electronic bulletin board system (BBS) or use it as a remote work station for a mainframe computer.

A modem is an piece of hardware that connects the ST to your telephone line. Several good telecommunications programs around, from freeware to moderate price (well under $100).

Minimum hardware requirements: a 520ST.

Music

The ST line is an industry leader in this area, with built-in MIDI connections that allow the machine to connect to and control multiple electronic music devices. You'll need additional hardware (the instruments) and a software package to control them.

You'll also want a hard drive to store your music. Check the software you're considering to see if there's a monitor preference.

CAD

Computer Aided Design (CAD) is often called by other names, but all refer to sophisticated software for precision drawing in two or three dimensions. The best products are pretty expensive, but are said to be the equal of the more popular PC products.

You'll most likely need a monochrome monitor, lots of memory, and a hard drive.

Graphic Arts

Sort of a mixed bag here, including both art programs and animation tools. While the ST's graphics capability is not at the leading edge of technology, it can yield some pretty impressive results.

For animation work, you'll need a hard drive, and probably a Mega 2 or 4; animation is another memory eater. Naturally a color monitor is preferred.

Emulation

An emulator allows one computer to pretend it's another. By the time you read this, the latest Macintosh and IBM PC emulators may be on the dealers' shelves. If rumor is any indication, both should be excellent--opening up huge software libraries to your ST. The Mac emulator needs a monochrome monitor.

Other Stuff

We haven't discussed the growing collection of third-party equipment for the ST series, including accelerator boards, sound extras, multi-sync monitors for both color and monochrome, a large high-res monochrome monitor, and more. We also haven't mentioned specialized applications software, like inventory, financial, tax preparation, and such.

One more thing: the Atari ST computers are the easiest to learn to use that I've ever seen. Sooo, if you're shopping for your first computer, take a close look. You may be in for a pleasant surprise.

The ST Toolbox
by J. Andrzej Wrotniak

Tempus II

Way Ahead of the Competition

Remember *Tempus*, the fastest guy in town, my favorite text editor? Written by Mr. Manfred Schulein in Germany, *Tempus* is back, as fast and well-behaved as before, with a plethora of new functions and an impressive degree of configurability.

For those of us who spend countless hours in front of our machines typing in large amounts of text, a good text editor is worth a lot. The original *Tempus I* was the best offer on the market, and with the introduction of *Tempus II*, the competition was left even further behind.

What Can Tempus II Do For You?

This is a text editor (as opposed to a word processor), so don't expect things like page formatting, different text attributes (bold, italics, subscript etc.), spell-checking and such. *Tempus* will just produce an ASCII file, but it will do it with a degree of convenience, speed, reliability and flexibility unmatched by any other program I'm aware of.

Version II introduces some rudimentary word-processing functions, as word wrap and text justification. These features are implemented in a very simple manner: you can just switch them on or off, and the page width setting will be the same for the whole file. The paragraph reformatting (performed on the fly, between the keystrokes) is faster and less distracting than in anything else I've seen.

What is vastly improved in Version II (as compared to the original), is the program configurability. *Tempus* is now the only commercially available editor with all keyboard bindings re-definable by the user, something I was missing in all other programs on the market. Want to do some simple Greek or Armenian word-processing? Need some extra mathematical characters? Want to swap Y with Z on your keyboard? Easy! Customization of *Tempus* for my native Polish (and for my keyboard preferences) took me less than three hours. No other program comes even close.

Basic features

Tempus allows for simultaneous editing of up to four text files in their individual windows, with a possibility of cut-and-paste operations between them.

All standard search, replace and jump operations are supported very well. For example, the search function allows you not only to define the search area, direction and case sensitivity, but also one- and multi-character wildcards and the horizontal(!) search range (e.g. all lines from Column 10 to 30). The wildcard operations are quite sophisticated (wildcards can be used in a way similar to program variables!), but this sophistication does not get in the user's way in simple tasks; you don't pay for what you don't use. Five bookmarks are provided, and a jump can also be made to a given line number, or to the place from where the last jump was performed.

The block operations include moving, deleting and copying from place to place. Cutting and copying into a clipboard would be nice here, but after a while you learn how to live without it.

The Undo operation could be designed better. You can use it for restoring a deleted block, but only before you introduce any other modification in the text, otherwise it will just restore the last modified line. Two separate Undo operations, one at the line, and one at the block level would be preferable.

Tempus II provides not only a choice between Insert and Replace typing modes, but also (what a relief!) a user-defined behavior of the cursor when it moves between lines. You may keep the cursor always in the same column (even beyond the end of line), or limit its position to the actual line length, or use a mixed approach (the initial column or the end of line, whichever is less). This seemingly minor feature makes a lot of difference for those who don't want to change their working habits and preferences, and it illustrates well the program author's attention to detail.

The program uses the familiar GEM-like user interface (although rewritten and customized for greater speed and convenience). This is good--we don't have to unlearn anything. Screen scrolling can be performed with mouse or from the keyboard, and--as everybody knows--it is really fast. You have to see this to believe it. In fact, *Tempus II* allows for a user-defined delay in vertical scroll, just to make the process easier to follow!

For file operations *Tempus* uses its own file selector instead of the standard GEM Item Selector. This selector isn't bad--in fact, it is much better than the standard Atari Item Selector, but I would like to be able to disable it. The switch-off option would be very handy for the users of the Universal Item Selector (what? you still haven't bought it?) or any other file selector of choice.

More goodies

Things like the corner clock, tab expansion, definable function keys, screen saver, page/line/column indicator and disk auto-save (user-adjustable, of course) are something we would expect from a product of this quality. Yes, they are here and they work just fine. There are, however, some more extras included.

Tempus can alphabetically sort your text lines (whole file or a block) in straight or reverse order, and the sorting can be limited in the horizontal dimension, as well. The program also can compare two files.

A quite powerful macro facility is included. Macros can be recorded with or without actually performing the operations being entered. They can also be nested (i.e. one macro can call another).

For programmers, *Tempus* can generate a cross-reference list and check the balance of any user-defined brackets (say, { and }, or BEGIN and END). Any block can be moved to the right or left (starting from any horizontal position). Nice.

You can run other programs from inside *Tempus //*, and the related memory management is now smarter (and less restrictive) than in Version I. One could think about using *Tempus* as a shell for program development (calling the compiler and linker from inside), at least for some compilers.

Customizing Tempus II

A text editor (or word processor) without a large degree of customization by the user is not worth much. If you are using just one program of this kind, it's all right, you can memorize the keyboard commands and live happily ever after. But if you are using more than one program (like when programming in various languages, with each environment having its own editor), you are in deep trouble. The same keystroke, say, Control-Y, may in one editor delete a line, in another mark a block start, and in still another--blow everything apart without warning.

In one session some of us may use as many as four different editors, each with its own keyboard command pattern. What a nuisance!

Here is where *Tempus //* shines--all keystrokes have user-defined meaning. Thus, you can assign the editing functions so that they are exactly like those of your favorite word processor, or you can design a new pattern yourself. Do you want to use the upper half of the ASCII set? No problem: every key (with Shift, Alternate or Control) can be assigned to an ASCII code or to a Tempus function.

This was a lifesaver with early copies of *Tempus //*, which were, by mistake, configured for the European keyboard. Some of the ASCII characters, like "<", "#" and such, were not where you would expect them in the US. No sweat, after ten minutes everything could be fixed. If you have Tempus II still in the wrong configuration and if you do not feel like re-configuring the keyboard yourself, contact MichTron--they should help, but doing it yourself is a breeze.

This is just the beginning. *Tempus //* will read a screen font in the Degas format and use it instead of the standard font. Then, when you use the "Save Settings" menu option, the font will be embedded in the program file and available as a default every time you run the program. Yes, you can switch back to the system font with one mouseclick (but after that to go back again to the embedded font, you have to load it from the disk).

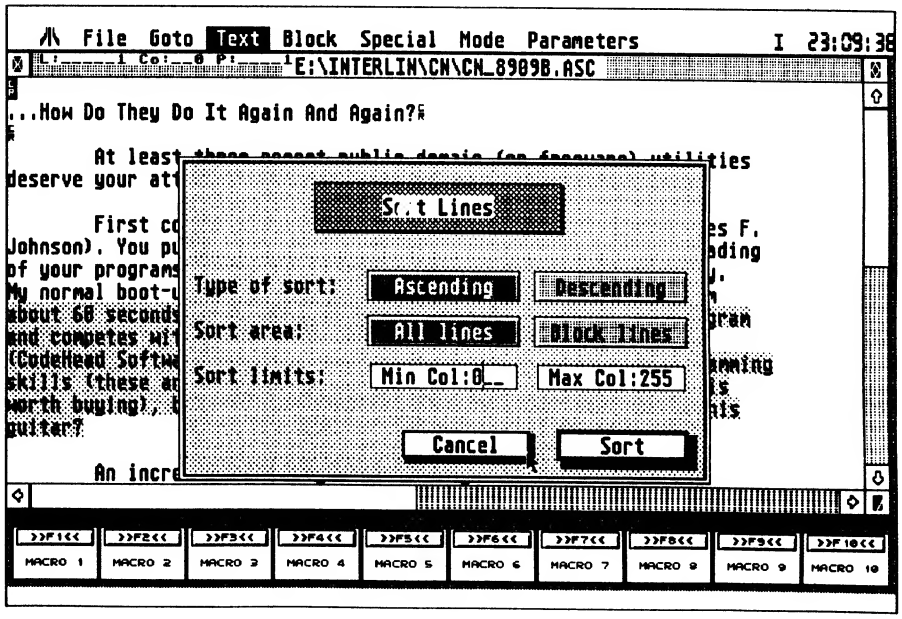
You can also customize *Tempus //* for your printer. Each ASCII code can be translated on the output into any character sequence (very much like in *First Word*), and any sequences can be sent to the printer before and after a printing job.

Now, this is something. To check how all these features work, I have redefined the upper ASCII codes (128-255) into Polish characters and basic math symbols, assigned them to "Alt" keystroke combinations, embedded the proper screen font into the program, and defined some downloadable printer characters as the printer initialization sequence. Each of the "upper" ASCII codes is reduced on output by 128, preceded by the "switch to alternate" and followed by the "switch to main font" commands. In addition, I have assigned all the text processing functions to my favorite keystroke combinations--the result is, at long last, the first text editor I can use without frustration (well, almost).

All this is easier to do than to describe, and you do it just once. Do you need to write letters in Lithuanian, Spanish or

Vietnamese? (Sorry, Arabic, Hebrew and Urdu will not do, they go from right to left). No sweat, get yourself *Tempus //* and an Epson-compatible printer, spend a day or two designing screen and printer fonts and customizing the program to your taste, and voila!

Many text-processing operations need to know what ASCII codes are used as word separators.



If you don't like the standard *Tempus* settings in that matter, you can redefine the separator list as well.

All these settings (keyboard translation, printer driver, word separators and some others) are kept in an ASCII file. At any moment you can load such a file into *Tempus* and activate the "Compile Settings" option. If you want to avoid repeating this procedure every time you run the program, use "Save Settings"--any or all options (including screen fonts, printer commands, pre-defined extensions in the customized file selector and many others) will be saved to disk inside the program file (yes, *Tempus* will modify itself!).

Documentation

Good-looking, complete and clear. You will easily find everything you need. Just what the doctor ordered.

Space for Improvements

Even the best program can still be improved. There are a few points in *Tempus* that I would like very much to have changed.

First of all, I don't think that the program desktop with icon-driven interface is worth the trouble. It looks good, but that's the best that can be said about it. To access the desktop icons you have to close (or, at least, reposition or resize) the text windows, and this is highly inconvenient.

In Version I, deleting a text from memory was, to put it mildly, a very clumsy operation (close all windows, drag the text icon into the trash can, double-click on the second text icon, remove the window out of way, repeat the last two points for the other texts, resize windows, bite your foot, get yourself a doctor). Version II includes, mercifully, a "Clear Text" option (one click or keystroke), but some of the clumsiness still remains. The desktop/icon interface is not designed right and the best you can do is just ignore it.

To re-open a text window you have either to go through this infamous desktop procedure, or use a keyboard shortcut. This is a departure from the general design principle of *Tempus II*, that all basic operations can be activated from the menu bar. Performing this operation quite infrequently, I have to look into my cheat-sheet every time. Inconvenient.

The assignment of menu entries to menu titles is not always logical, especially between the "Special" and "Parameter" menus. After using the program at least once a day for about four weeks, I still sometimes have problems finding a menu option. A slight change of design could be quite helpful here.

Last, but not least, there is one thing which *Tempus II* would need to have to become a really international text editor. All the keyboard-mapping features I have described above, as well as the screen font substitution, work only in the editing windows, not in the dialog boxes! This means that I can, for example, assign ASCII 132 to the Greek letter Sigma, but I cannot use it in the search (or replace) operations! This limitation would be easier to understand if *Tempus* depended on GEM AES dialog routines, but no, its dialogs are custom-written (all dialog buttons have even keyboard equivalents, which nobody ever is going to memorize). I may suspect that this limitation is, again, just a matter of design, not of the cost of implementation.

In other words, while you have full control over what *Tempus II* will show in the text windows, when you type a character in the dialog boxes, you have no control whatsoever. Removing this limitation would dramatically increase the program's usefulness for many less orthodox applications (it would cost us the keyboard shortcuts in dialogs, but I couldn't care less, and I don't think many of us do).

Conclusions

My criticism of some of the design aspects does not change the fact that *Tempus II* is far, far ahead of any competition in the field of text editing on the ST. Wide array of functions, robust implementation, good feel, crisp response, amazing speed and great degree of customization make it a clear winner. It is also very reasonably priced.

If you have even a moderate need for a text editor (for programming, preparing a text for desktop publishing and many other similar tasks), then buy it right away. A most impressive piece of work, worth every penny out of $45-$55 you may expect to pay for it at your friendly Atari store.

Tempus II, MichTron, 576 S.Telegraph, Pontiac, MI 48053 (313)334-5700

Three New PD Gems!

...How do they do it again and again? At least three recent public domain (or freeware) utilities deserve your attention.

Pinhead. First comes the tiny *PinHead* (by the restless Mr. Charles F. Johnson). You put it on the bottom of your \AUTO\ folder and loading of your programs and accessories is speeded up very considerably. My normal boot-up sequence (from a hard disk) is down to 25 from about 60 seconds! PinHead is based on another public domain program and competes with Mr.Johnson's own commercial product, *TopDown* (CodeHead Software). The author demonstrates not only his programming skills (these are already generally known, everything he wrote is worth buying), but also his integrity. When does this man play his guitar?

Packer. An incredible utility from Germany--we do not even know who wrote it, hidden under the ESCAPE alias--***Packer*** (or PACK) takes almost any other program file and reduces it in size by 25 to 50%. The produced file can be executed

(Continued on page 49.)

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DEMON'S WINTER

Battling Clean-up In The World Xeres

View From Afar

You're not sure why, but you're just a third-person perspective kind of adventurer. (You other types, stay with this.) Maybe it was a fascination with atlases and maps as a child, and that a third person CRPG (Character Role Playing Game) is like traversing a Random McNally other world. Maybe it's the omniscient feeling the overhead viewpoint imparts, that of a deity manipulating mortals like chess pieces in a Ray Harryhausen film epic. Or maybe you just don't like the sense of wearing blinkers that those tunnel visioned first person games give you. For you, there hasn't been a decent world to explore in a while.

Along comes SSI's *Demon's Winter*. You've heard it has a huge world to explore, so you buy it and boot it up. Pretty fair title screen, but what's that egregious excuse for theme music remind you of? And what does that eight-bit artwork recall? Heavens, to Beelzebub, could *Demon's Winter* have been ported by that Bunch of Guys from Andromeda who butchered *Wizard's Crown*? Relax. It was actually converted by two guys from Novotrade, a Hungarian company, and despite its eight-bit look and feel, *Demon's Winter* is good enough per se to be worth your hard-sought play time. Most of you inveterates played *Ultimas* III and IV, two classic third person games, in eight-bit format, and both surely are memorable in the grottoes of your gaming experience. So why pass up a passport to the land of Ymros? Here's what the trip is like.

Ymros appears in a graphic window measuring 95 by 115 millimeters, with an artistic quality somewhere between *Phantasie I* and *Questron II*. Terrain includes the usual forests, mountains, and waterways, but also includes deserts, tundra, and a purplish tile called kudzu. Tiles aren't contoured, so the look is pre-*Ultima* V Lego blocks. Movement is performed with either the mouse or the keyboard. Some disc access, that probably shoudn't exist, occurs during travel. The smallish window makes the learning curve of the land a little longer than it might have been, but, sooner or later, you'll know your way around the snaking main island. Limited vision is employed to represent nightfall and mountain obstruction; tiles your viewpoint shouldn't allow you to see are blacked out. Towns are represented as a cobblestone tile, and are like the towns in *Phantasie* sans graphics: single screen, strictly for maintenance.

Your party will have to gain several levels of experience before they can afford a ship, but once they do, your voyages will reveal that Ymros is about as large as *Ultima IV*'s sprawling Britannia. A third person perspective adventurer's paradise.

High IQ Monsters

Combat is a simplified *Wizard's Crown* implementation, and the result is a very playable system. Once familiarity is achieved, most battles can be resolved in five minutes or so. Graphics are pretty dismal, but each monster or party member has a front, side, and rear view, depending on its facing. At first, a lack of distance weapons is disappointing, but this omission actually increases tactical interest, especially since Ymros' monsters are more intelligent than anything you encountered in the Ultima series. Offensive spells, however, can be aimed anywhere on the scrolling combat map. An intriguing feature about offensive magic is that you can decide how powerful a spell will be by the number of spell points you choose, a decision that is always affected by the need to conserve. It's possible to run from combat, but care must be taken. Enemy mages love to summon a monster right in front of the exit square, or bind your last adventurer just before he can leave. Combat remains interesting longer in *Demon's Winter* than a lot of CRPGs. Balance is handled fairly well for a non-linear game, but expect to meet some advanced enemies occasionally that will send you and your five adventurers back to re-boot camp in a hurry.

College Courses

Besides the usual experience points and levels for character development, *Demon's Winter* also uses a non-automatic skills system. The game has many training colleges scattered and secluded throughout Ymros. The strongest lug in the land can't wield a morning star if he hasn't been to the College of Mace. (What conference do *they* play in?) There are thirty-one skills in the game, some of them vital, and ten character classes with varying point requirements for learning each skill. Each character can start with two player chosen skills, but many more are needed to succeed. The system is interesting and requires

planning, but there are too many options for a game that likely will be played only once to a conclusion.

Magic is also learned as five separate skills, called the runes of fire, ice, metal, spirit, and wind. Like most magic systems, you only need a handful of spells out of the 40 available. It's important to learn each class, though, because binding takes place in several ways requiring different release spells. Otherwise, it's the usual assortment of cants that heal and resurrect, modify attributes during combat, and waste monsters.

The eight dungeons in Ymros are very simple to negotiate. Most are one level only, and sketchy mapping is usually all that is needed. One tedious aspect of dungeon travel is that you must examine every square in every room. Coupled with trap detection, that's four key presses for every step made. If a bookcase is in a room, it should be obvious. Object dots with automatic text boxes like *Phantasie* utilizes should have been incorporated. Although the dungeons of Ymros aren't reduced in scale like *Phantasie's,* the feel of both is quite comparable.

Demon's Winter attempts to do a little more with plot than the average CRPG. At first, information is sparse. All you know is that a small army of monsters who worship some demonic deity named Xeres have just wiped out your village. Each town you visit that has a pub offers one clue. By the time you purchase a ship, you're not sure where to go or what to do. Like *Phantasie*, the plot unfolds in the dungeons, but there is a great deal more text than in that SSI trilogy. Certain events also trigger long text messages appearing as psychic communication. The prose is a bit purplish, and it's not as deep as Wasteland's material, but you have to be impressed with the attempt to flesh out a story line. On the other hand, the game is non-linear, and so it is possible to complete some tasks in a different order than the designers intended. This can give the gamer a convoluted sense of the plot. One aspect eight-bit gamers were strongly warned about was to make sure they obtained the Demon Crystal before they acquired the Orb of Evertime. Doing otherwise could mean starting over well into the game. Although the ST version may have been remedied, it appears to be enough of a straight port that the chance isn't worth taking.

Under Utilized Detail

A lot of time and code was spent on some aspects of *Demon's Winter* that just didn't come into play. There are all kinds of magical and powerful items sold in the marketplace that your party will never be able to afford. A fairly intriguing system of polytheism wasn't integrated deeply enough into the game to make it worth the player's while. Between these two shortcomings, five pages of documentation could've been ripped out of the manual with no great loss. There are so many character classes and clever, useful skills that you will be a bit frustrated to be unable to explore them all in the course of one game. This is more or less true for all CRPGs, just more so for *Demon's Winter.* Most of the other criticisms that players have aimed at the game can be applied just as pointedly to the Ultima benchmark. Indeed, *Demon's Winter* has several things in common with that series, most of them positive.

A Joy For The Jaded

It is clear by scanning GEnie's ST games category that the jaded coterie of experts who frequently upload messages there generally enjoyed this game. For fans of third person perspective fantasy games, like this reviewer, it was a welcome task that provided an overdue fix for the need to discover and explore a large mythical world. Enjoy *Demon's Winter.* It may be a cold day in hell before another third person quest comes along.

MISTY WRITING.....The U.S. release of Origin's *Times of Lore* appeared in early August. As reported months ago, the European version had some major problems. The good news is that it appears to be bug-free, and the scrolling speed has been increased to an acceptable rate. The bad news is that, in order to improve scrolling speed, the graphic window has been shrunk by almost half. Review coming soon.....Answers to June's QUESTionnaire: 1. Unlimited use of bard songs. 2. Die! Fool! 3. Unidentified. 4. Castle music to Ultima III plays. 5. Invoke, Forcecage, Fuse. 6. A minotaur must be in party. 7. President. 8.Wand of Filmon. 9. To the city that practices the virtue you failed. 10. Lord Wood.....Next month's review: *Deathbringer*, otherwise known as *Galdregon's Domain* to you Old World Boys.....As always, if you need help with an ST CRPG, you can reach me on GEnie (R.MILLARD1), or write me at Current Notes.....

ST Toolbox (Continued from p. 46)

just as any other program, by double-clicking on it. Examples: *Fontz* was reduced down to 51% of original size, *Word Writer* to 57%, and my own *El Cal*--to 61%. An absolute must for both hard drive and floppy owners.

Quick Start 1.45. A screen speeder-upper (similar to *Turbo ST*, but free), *Quick Start v.1.45* by Messrs. Darek Mihocka and Ignac Kolanko. On the basis of a casual comparison with the use of *El Cal*, I can say that the increase in speed of screen redrawal (both text and dialog boxes) is quite noticeable, better than with *Turbo ST 1.4.* (An improved version 1.5 is now available as shareware).

Imagine, while you are reading this article and sipping your delightfully cool carrot juice, some wizards with eyes red from lack of sleep are putting together these magic pieces of code, just for the heck of it, and for us, to use and enjoy?

Lost Dutchman Mine

Review by Don Elmore

"EUREKA!" Roughly translated, that means that I've found the Lost Dutchmen Mine and can now retire from government service to the opulent lifestyle that I so richly deserve. Dave Lindsley and Steve Marshall of Magnetic Images have come up with a very playable and enjoyable game. Like the ongoing real-life Lost Dutchman quest, MI's quest requires two main ingredients; hard work and a generous dollop of luck! It does not require the super eye-hand coordination of the younger computer gamer. Even I can eventually shoot the endless procession of Indians, claim jumpers and sidewinders (rattlesnakes peculiar to the deserts of the Southwest).

Up until a very short time ago, I was prepared to begin this review by describing in great detail, my "holdings"; over $45,000 in Goldfield Bank, all three mules, more than 20 canteens, two pistols and four boxes of bullets and beaucoups fish to nibble on...all by way of justifying my reviewing the game without having actually found the mine. But, Lady Luck smiled upon me and I therefore started this review with "EUREKA!"

The game comes packaged in a box with disks A & B and a well written instruction manual. So far there are two versions out, 1.0 and 1.02. The latter fixes some pretty formidable bugs infesting the former, and includes a claim registration form with the packaging (more later). It is a large program and plays quite comfortably from a hard disk, thank you. If you are running it on a 520ST, shut down all of your desk accessories and leave disk B in the drive. The program is not copy protected, but you will be asked from time to time to enter a certain word in a specified line on a specific page of the manual.

The Lost Dutchman is a one-player game that alternates between the joystick and the mouse; the former to move the prospector (you) around the screen, and the latter to choose options or make selections (such as purchasing items at the general store, etc.). The only exception is when you are in a mine, or panning at the river. Pushing the joystick fire button causes your prospector to swing his pick mightily into the pulsating deposit of ore, remove said ore,

bag it and tie the bag (with all but the initial swing being accomplished so quickly that you never see it). The fire button at the river (if you have purchased a pan) will cause the prospector to squat and vigorously rock the pan back and forth, gaily gathering the golden flakes...

So, let's finally get to the game. The bottom portion of the screen shows a status panel with a thermometer, clock and icons for cash, health, food, tools, bullets and disk functions. The icons can be queried by using the left button of the mouse or by pressing the appropriate "F" key. In town, the top half of the screen shows Goldfield's main street, consisting of the Doctor's office, Saloon, Mercantile, Assay Office, Goldfield Bank, Newspaper Office, Jail and Livery Stable. Use your joystick to guide the prospector to whichever building you want and lead him in. The instructions clearly explain each building and what it offers. Pressing the fire button switches to an overhead view looking down on the town and surrounding desert. Use that mode to travel along the road at first and then for short forays into the desert. Feel free to use the fire button to switch to a ground level view any time you want to see details, e.g. searching for caves and/or abandoned mines.

The ultimate goal is to locate the famous Lost Dutchman mine and return to the Assay Office to register the claim. Meaningful interim goals are staying alive, collecting gold and building up a bank account. You will develop your own individual play strategy...I'll share some of mine with you, it might make it a little easier for you.

You arrive in Goldfield with a $250 grubstake. In addition to temperature extremes and the very real possibility of starving to death or dying of thirst, the desert offers three hazards. They are:

1) rattlesnakes,
2) robbers/claim jumpers, and
3) Indians.

All attack without warning (unless you are on the road or happen to be standing in the river). You can run away from all three, but running from the Indians or robbers will cost you your possessions (gold, mules, food, etc.). You can fight the Indians and/or claim jumpers with a

pistol, but a pistol costs $200 and bullets another $50. So, if you use your grubstake to buy a pistol and bullets, you will be able to protect yourself...but you have no funds for a pan or pick or any canteens or food. If, on the other hand, you invest in a pan and pick and try short trips to the desert to find enough gold to better equip yourself, you just might be lucky enough to accomplish that. More often than not, though, you'll be attacked by someone, or something before you get back to the relative safety of the road. I was. Constantly!

"....How about a game of cards, als heimer?"

So, my strategy was to head to the Saloon for a shot of whisky and some profitable poker with Dapper Dan, the gambler. After winning at least $500 or so, I would then visit the Mercantile and load up, including canteens, some food and a fish hook. Don't forget gloves and rope. Actually, I would start off with as little as possible, hardly any food or canteens because I had to carry everything myself. After a few trips, assaying the gold and building up a bank account....or after taking Dapper Dan to the cleaners, I invested in a beast of burden or two. They are not cheap, "Alice" goes for $800, "Betsy" for $1,200 and "Clara" for a whopping $2,000! But, they are literally worth their weight in gold. With all three mules you not only can load up with sufficient canteens and food for a couple of weeks in the desert, you also have room for thirty or so bags of ore to bring back to town.

Be prepared to be bitten by snakes, shot with arrows by the Indians and filled with lead by the robbers. When attacked, a gunsight appears on the screen and you maneuver the gunsight with the joystick until it covers the target and then fire with the fire button. I found the robbers easiest of all to kill, the snakes next in difficulty and the pesky Indians the most difficult to hit. They jump back and forth, and the gunsight tracks slowly. So, I spend a good deal of my play time heading back to town so that the Doc can patch me up.

As for actually finding the mine...you can buy a piece of a map at the general store. You will have to perfect your poker playing, because if you can bust Dapper Dan, he will offer up an additional portion of the map (with considerable more detail). There's a third (equally important) part of the map somewhere out in the desert, and quite frankly, if you don't have all three parts of the map, finding the Dutchman will be largely a matter of blind luck! There are some cute details woven into the play. For example, if you do shoot the rattlesnake, it is added to your grubstake, and believe me, faced with starvation, even fricasseed rattlesnake is palatable. Vertical shafts in the caves require a rope to descend, but if you get only the rope (and not the gloves), be prepared for your prospector's painful exclamations as he climbs down and up. Rope burns, yet!

The bugs that version 1.02 fixes are random crashes during the play, and fairly regular crashes after sleeping the night in the Saloon. I mentioned a claim registration form in version 1.02's packaging. If you are successful in finding the mine and register the claim at the Assay Office, you will be given a claim number. Fill in that number on the registration form and send it to MI because sometime after Xmas, they will verify the legitimacy of all numbers received and from them, select three winners. The first place winner will receive a real gold nugget, the second place winner a gold panning kit and third place a gift set of Arizona minerals, including some gold flakes. Additional details will be forthcoming via MI newsletters and will perforce be highlighted in CN. As you can see, I am quite impressed with the game ... very definitely a thumbs up on this one. It is challenging, interesting and rewarding!

Magnetic Images Co.
P.O. Box 17422
Phoenix, AZ 85011
Tel: (602) 265-7849

AtariFest '89

People Power on Target

by John Barnes, WAACE Chairman

With the cancellation of the Glendale show and with subsequent World of Atari Shows under review, WAACE's AtariFest '89 may be the best outing for Atari addicts for a long while to come. This show is scheduled for October 7th and 8th at Fairfax HS in Fairfax, VA. Admission is free and the Fest is open to the public.

Atari With Bells On. Georgia Weatherhead, our Atari Corp liaison person, tells us Atari has promised an invasion in strength and depth. VP Sig Hartmann will be leading the delegation and Sig will be the keynote speaker at our banquet on Saturday evening.

Arrangements are being made to receive a shipping pallet with such goodies as the STACY, the Portfolio, and a Megafile 44. 8-bit enthusiasts will want to check the 80-column *Atariwriter* and the *SX Express* communications package. *Word Flair*, Atari's flashy new word processor will also be on hand.

Your Favorite Vendors. Tables in the vendor area have been going like hotcakes. Over half the space had been leased by early August and we may have to use the overflow room. All of your favorite Washington Area stores are represented as well as many of the liveliest national merchants and software developers.

Special Treat for MIDI Fans. Richard Viard of Dr T's software will be giving a special presentation on Sunday afternoon showing how Atari computers give high powered sound and video.

The MIDI demonstration room on Saturday promises to be a real jam session. Folks from all over have been dying to get in on this one, to be run by MAST, our newest WAACE user group.

Scott Ogden and his tech wizards will set up the ever popular MIDI Maze game on Sunday. Get in line for a great adventure and more wonderful prizes.

Get yer Souvenir Programs. With ads from vendors everywhere, special feature articles, the straight scoop on user groups, and the complete rundown on Fest activities, our 64 page souvenir program will be something everyone will treasure. Steve Rudolph and his crew will be putting it bed in a week or so.

The Straight Scoop. Preliminary contacts with Gribnif, Codehead, Michtron, ICD, WordPerfect Corp, promise a lively seminar series. Featured independents like Andrzej Wrotniak (mystery topic) and D. A. Brumleve ("Kids and Computers") will entertain as well as educate. Atari Corp promises to provide us with an inside view of the future of Atari's product line.

Gather Round the Campfire. Saturday evening will feature a buffet style banquet at the Hunan Lion III in the Fairfax Quality Inn. Our out of town guests will appreciate the $49.50 room rate being offered to Fest attendees. Be sure to ask for the special rate when you make your reservations.

Special features at the banquet will be the awards to Current Notes' Author of the Year and to the winners of the WAACE-Current Notes Desktop Publishing contest. Sig Hartmann will take us inside Atari Corporation in his banquet speech.

Get your banquet tickets now if they are still available (ticket price $20).

Users Helping Users. The demonstration rooms, wherein experienced users show neophytes the ropes, are shaping up nicely. The popular **Telecommunications** and **Emulation** rooms will be up and running (dare we hope to see a Spectre GCR in the flesh?). **Programming** mavens will find something in their special room. An **Art** room is a new feature and we hope to have a room devoted to **Hardware** add-ons and another to business applications.

The **Desktop Publishing** room will highlight the DTP contest. Early readers of this issue of Current Notes may still have a chance to get their entries in.

In addition to ongoing live demonstrations many of the rooms will have special presentations. Check your program for the schedule.

The **Swap Meet**, run by the GRASP user group, will offer the chance to give your old equipment a loving home. Look for bargains in hard to find used equipment to round out your own inventory.

Prizes Galore. Saturday's grand prize, donated by Atari Corp, is an ST computer system. ABCO Computer Electronics, of Jacksonville, FL is donating a 20 meg hard drive as Sunday's Grand Prize. There will also be dozens of lesser prizes, donated by vendors all over the Atari community. Make sure you registerwhen you come in so that your name at least has a chance of being called.

WORD QUEST

Hidden Word Puzzles -- An Upgrade

Review by Bill Moes

Word Quest 3.00+ is the latest version of a program to generate hidden word puzzles. An important new feature is the ability to save a puzzle as an ASCII file. This opens up some useful possibilities.

Word Quest 3.00 was reviewed earlier (CN Sept. 1988) and the features from that version remain the same. (Note that the only difference in the software title is the new "+" at the end.) Word hunt puzzles are created from words, entered either singly or in a list. Any of eight directions (N, NE, ...) may be used for word placement and puzzle size can vary from 5X5 to 20X20 letters.

Other features are available to edit puzzles and the GEM-style software offers keyboard alternatives to most program functions.

Some new features, though, are worth noting. Now, a puzzle may be saved as an ASCII file. Later, the puzzle could be edited with a word processor by simply loading that ASCII file.

Teachers, for example, may delete the word list printed below the puzzle matrix and add a list of word definitions instead, making the puzzle's completion more of a challenge. And, perhaps, other changes and challenges could be incorporated.

With this newest version of *Word Quest*, puzzles may be directly printed, saved to disk as an ASCII file, or printed to the screen. In all cases, though, a printer will need to be connected to the ST and switched on. The software will not allow an ASCII disk file to be saved unless a printer is ready. In addition to the normal puzzle, it's now possible to have a "grid" with the puzzle matrix. The grid is created with letters across the top and numbers down the left side. This can be used with the newly available answer key. The answer key has the grid. It also includes the location (letter/number) for the first letter and the direction for the word (N, NE, ...), all printed next to each word in the puzzle list.

Registered owners of *Word Quest* can obtain the new version by ordering the optional puzzle disk ($9.95 plus $.50 postage). Fifty puzzles are included.

With the ability to save a puzzle in ASCII format and the chance to obtain an answer key, *Word Quest* ($29.95) now offers new possibilities. The features of this program make generating word hunts both easy and flexible.

[Artisan Software, P.O.Box 849, Manteca, CA 95336]

R	E	O	S	T	M	I	O	P	U	B	L	I	S	H	E	R	Y	N	U
B	T	D	N	E	S	I	L	E	N	T	S	E	R	V	I	C	E	N	W
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Y	L	C	M	R	P	L	E	H	S	O	A	P	E	T	U	C	R	C	L
D	Q	R	B	T	K	S	E	A	N	A	R	C	N	C	C	D	L	L	R
T	A	E	D	Q	C	A	L	T	A	T	G	D	B	A	W	E	A	A	U
M	C	O	I	O	U	D	N	P	Y	N	L	I	M	R	M	Y	P	F	B
J	A	E	E	C	D	E	M	O	A	E	I	T	I	D	A	C	P	S	U
G	R	Y	F	T	R	A	S	M	I	G	D	T	U	R	X	R	A	X	R
U	E	I	R	R	O	E	T	T	M	D	E	O	S	A	I	A	E	P	U
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G	O	D	N	U	S	R	E	D	I	A	R	R	A	T	S	I	I	B	O
U	N	I	S	R	E	O	D	C	H	E	N	A	I	X	A	L	A	G	B
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ARKANOID
ATARIWRITER
BATMAN
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SUNDOG
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WORDPERFECT
WORDWRITER
ZAXXON

THE XL/XE GAME CART • by Len Poggiali

Owners of the XE light gun have had little to keep them amused until recently. *Bug Hunt*, which came with the game system, and *Barnyard Blaster*, sold separately, were very good, although limited in appeal. In both, staying alive was possible as long as the player kept killing defenseless insects, rodents, and fowl. Atari's newest offerings--*Crime Buster* and *Crossbow*--provide more challenge than the earlier games, albeit in quite different ways.

Crime Buster

Crime Buster takes place in Chicago in 1931, a time when mobsters ruled the "Second City." Your job is to rid Chicago of this human plague by traveling to each of twelve sectors and by shooting as many bad guys as possible.

After determining whether to play a one- or two-player game, you are presented with a map of the city. If you select a distant sector, you next will find yourself on a road riding in a police car. Along the way to your destination, you will be attacked by mob hitmen in autos of their own. If you don't destroy their cars, you quite likely will be hit by gunfire, and your vehicle will explode with you in it.

You aim your shots by firing at the five arrows at the bottom of the screen. Watch out that you don't kill innocent drivers, however. That will cost you ten of your precious bullets. Your car may be sped up or slowed down by shooting one of two other arrows. Shooting at the arrows instead of directly at the figures is more difficult, adding a greater measure of challenge and tension to the proceedings.

Surviving the road trip will bring you to one of four other screens. Depending on which sector you choose, you may find yourself downtown, at the pier, in a warehouse, or in an alley. The city contains two buildings, a street, a blue roadster, and a manhole. A variety of figures appear at windows, doorways, on the street, and from beneath the manhole. Many are gangsters; some are not; others look harmless but turn out to be deadly. Your limited supply of bullets may be drained prematurely in one of three ways: poor shooting, allowing yourself to be shot by a bad guy, or hitting a bystander.

In addition to windows and doorways, the warehouse features boxes and crates. At the pier, targets are located aboard a boat and in the water. Due to these different objects and structures, their positions, and some variety in characters from screen to screen, the feeling of sameness will not overtake players as soon as it did with earlier gun games.

Crime Buster was relatively easy at first. It was only after I had completed nine sectors and had attained the rank of Inspector that things became difficult. Then I couldn't seem to hit anything and would lose my three lives quite quickly. After hours of play, I only improved one screen, becoming an "Unpluggable" in the process. Incidentally, THE UNPLUGGABLES was the working title for this game when it was first publicized over a year ago.

Overall, *Crime Buster* is extremely successful. The cartoon-like graphics are a credit to the machine. Animation is equally impressive. Unique bits, such as guns flying out of killers' hands and beanies worn by hitmen (disguised as children) exploding after being shot are a joy to behold. The program's responses to the light gun left little room for complaint. Having characters shoot back helped promote a sense of danger which was lacking in the earlier games.

My only problem with *Crime Buster* was its use of children and childlike figures as targets and its blatant sexism--sexist because at no time did a female character turn out to be a villain. Otherwise, this original game (not found on any other video game system) is well worth the cost and the effort.

Crossbow

Even more enjoyable was the 1984 arcade hit, *Crossbow*. Adapting this multi-screen adventure for the Atari gun was a stroke of genius.

Unlike the other three gun games, in *Crossbow* you are not the character being attacked. Instead, your on-screen friends are the targets of a variety of human and non-human enemies. Your goal is to protect them by firing your gun (crossbow) at those objects and creatures who are bent on leaving you friendless.

Your comrades' objective is to reach the castle of the Evil Master so that you may retire him permanently and retrieve the treasures he has stolen. Before confronting him, you must survive a number of obstacles in eight different locations: scorpions, snakes, and vultures in the Desert; ghosts and other things that go bump in the night in the Village;

boulders and swooping pterodactyls at the River; bats and falling stalactites in the Caverns; burning rocks near the Volcano; bad-natured monkeys and poison plants in the Jungle; bowmen and pterodactyls at the castle Drawbridge; and a fire-breathing dragon, arrows, and daggers in the Castle Hall. Points also are accumulated for shooting numerous relatively harmless creatures and objects in each screen.

From the Map screen, you pick which of the eight Danger Zones you wish to traverse. In order to reach the castle interior, you must choose the correct route. Otherwise, you will continue to go from zone to zone until you do so.

For each new zone you complete successfully, you will receive an additional companion. You will need all the friends you can earn. Getting each through the various dangers is no small feat. Keeping even one alive after the toughest screen--the Castle Hall--is an impressive accomplishment. Making it through this next-to-last challenge is a good deal more difficult than defeating the Evil Master. This is done by shooting his eyes when they turn red.

No other light gun game offers as much challenge and variety as Crossbow. In addition, its graphics are arcade quality; its animation is cartoon-like; and its sound is more than adequate. On the basis of this one game alone, I would recommend XE owners to go out and purchase a light gun.

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DIAMOND GOS

"ST Junior"--New DOS for the 8-Bit Atari

Review by Ron Peters

"ST Junior," the Diamond Graphics Operating System (GOS) by Alan Reeve of Reeve Software, is a picture-driven DOS for the 8-bit Atari.

"Big deal," you say, "what's a Graphics Operating System?" Well, it's like DOS, but instead of selecting menu items by typing a letter and commands, you point and click (with a mouse) at icons--pictures of disk drives, trash cans, windows, etc., to run programs, copy files, format disks, and all the usual DOS functions. The Apple MacIntosh, Atari ST and MicroSoft Windows program on the IBM PC use similar graphic systems.

"Big whoop!," you continue, a little louder. "Just what I need, a mouse running around my computer table, pointing, squeaking, clicking and whatnot at pictures on the screen. I suppose you point its tail at the screen and tweak its nose?"

Real funny. But it is a big whoop if you type with two fingers (on the same hand), or if trying to remember DOS syntax is like playing hopscotch on IRS tax forms (although Atari DOS is about as simple as you can get).

For example, with Atari DOS 2.5, to copy a file you select the copy function by typing the letter "C" and filling in the "from" and "to" parameters. If you forget the proper syntax, like:

D:myfile.ext,D2:newfile.ext

you get an error message and start over.

With ST Junior (let's call it Diamond) you merely point at the file you want to copy, drag it to the picture of the 2nd disk drive, and then follow the prompts. To run a program is simple: point at the file and double-click (press the mouse button two times in quick sequence--tweak its nose twice).

The Diamond GOS comes in either a disk version, or a cartridge-disk version. The cartridge is a piggy-back type, allowing you to plug in another cartridge on the top, and comes with a variety of disk utilities that allow you to configure GOS to your system (number and type of drives, amount of memory, DOS version, etc.). Configuring GOS is a fairly straightforward procedure by following the directions in the manual, which, by the way, is sprinkled with pictures throughout to help you get started. A table of contents and an index would have helped, however.

As you boot Diamond, you will see one or more disk drive icons on the top left side of the screen, and a trash can icon at the bottom left. Across the top of the screen are four menu words: **Desk File Disk Options**. Pointing the mouse (arrow) at any of these words causes a drop-down menu to appear on the screen.

To help you visualize this, the drop-down menu is like pulling down a window shade, except instead of covering the window it opens a window in what was before a blank wall. Got it? Well, I tried. You had to be there....

The same thing happens if you point the mouse arrow at the disk drive icon and click the left mouse button twice in rapid succession. The disk drive whirs, a window opens on the screen, and a listing of the files on the disk in that drive appears. The window can be moved across the screen, can be made larger or smaller, or closed (erased). To run a program on that disk, you point the mouse arrow at the program filename and click twice. If the file you click at is not an executable program, you are given the option of viewing (seeing it on the screen) or printing the file, or cancelling the whole operation. These options appear in a dialog box; that is, another window in the screen where you point and click at your choice.

To delete a file, you point at the filename, hold down the left mouse button, "drag" the filename (it actually moves across the screen) with the mouse to the trash can icon and release the button. You will then get another dialog box that gives you the option of erasing the file or cancelling the operation and returning to the main screen.

While all this sounds rather complicated, it really isn't, and becomes very natural. It's faster than typing, even if you are an accomplished keyboard artist.

The functions across the top of the screen (Remember? Desk File Disk Options) give you access to drop down menus that provide regular DOS functions, like copy a file, lock a file, create folders (sub-directories), disk copy, format, etc. You can also install other disk drives and save the whole mess to disk so that the next time you boot the same format will appear.

But, enough of this tutorial on graphic operating systems. There are a lot of other features, but how does Diamond perform on the job. Well, pretty good. About a B- I'd say. Why not an A?

First of all, it's slow. To copy the GOS utilities disk it took me 18 passes with a single disk drive. However, given the 64K memory constraint and the fact that you are manipulating a lot of graphics memory instead of just text, I guess it's understandable.

Second, Diamond uses more memory than Atari DOS, about 8K

more. That's a lot when you're only working with a small amount to begin with.

Third, it crashes at times, like when trying to open a second disk drive when you don't have one, or when trying to read a disk of a different density from that you have configured, or when plugging the *GATO* (submarine simulation) cartridge into the top of the Diamond cartridge. Maybe these are no-no's on my part, but I don't like crashes even when I screw up.

Fourth, you can't designate a block of files to be copied or deleted, nor can you use wildcards. One at a time, folks.

Fifth, I found the point function a little touchy, and had to move and click several times at some prompts before the program would accept my intentions.

Finally, no error codes are given when a disk error occurs. The only message you get is "A disk error has occurred." Big clue, Inspector Clouseau!

However, Diamond does a lot of things well and is a nice way to go if you are looking for a different approach, are new to computing, or can't type beyond 1 wpm. The graphics approach is novel and fun to learn.

By the way, you don't have to use a mouse. A touch tablet, joystick, Koala pad, touchtablet, or the arrow key will also operate the system, but it's like using a shovel to eat a bowl of soup. Without the mouse any GOS turns into a GDOS! (Sorry.)

Reeve Software has also released a *Diamond Paint* program (and is reportedly coming out with *Diamond Write*), which frankly did not send any shivers of ecstasy down my spine when I booted it up. I didn't see any exotic capabilities and I couldn't manage to get the program to work for more than two minutes without crashing. Perhaps I got a bad copy?

The Diamond GOS system deserves a lot of credit for creating a graphics operating system for the 8-bit Ataris, and perhaps future developments will make it a viable system for the XL and XE machines. But, in my opinion, it is like putting an inertial navigation system on a lawnmower. 8-bit systems are too slow and have insufficient memory to effectively handle this type of operating system.

The disk version is $29.95 and the cartridge version and Programmer's Kit are $79.95, plus the cost of an ST mouse.

As for me, I'll stick to Atari DOS 2.5. Since I have an ST at home and an IBM at work, I can play mouse and have trash cans on my monitor any time.

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CN SPECIAL

AIR WARRIOR

Exciting, Expensive Nationwide WWII Battle

Review by Mike Heininger, (c) 1989

"FW on tail, help!" radioed my son in San Diego, California, as he dove his Spitfire toward home field in Country B with a Focke-Wulf 190 from Country C's dreaded ace squadrons in hot pursuit. On my Atari 1040ST screen in Woodbridge, Virginia, I rolled my Spitfire left into a dive as I saw the two blips draw closer.

"Roger, Surf, Halo coming," I quickly typed on the radio channel we had selected for private communication. As my Spitfire's speed picked up past 320 knots I saw my son's blip emerge into the familiar Spitfire shape, but streaming smoke.

Aiming slightly ahead of the pursuing Focke-Wulf, I pressed the right button of my mouse control. As the reassuring tatter of my machine guns hurled a line of tracers in the flanking attack, little red flashes marked hits on the Focke-Wulf as he banked and flashed below me to the right. I whipped the mouse back and forth, rolling over and back after the crippled Focke-Wulf as it dove away.

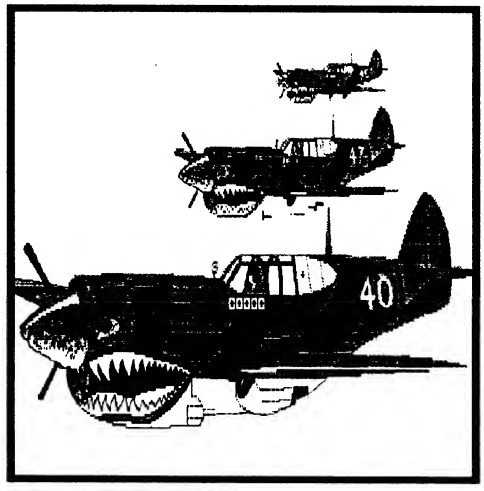
Usually I'm the hunted, but this time it was different. Completing the roll, I found myself right on his tail. I hosed him good, to be rewarded with a satisfying explosion followed by a verified kill message from the Air Warrior system.

Risking attack by the Focke-Wulf's squadron mates, I lingered a moment to watch his parachute. Retribution was swift -- a nasty spitting sound and red screen flashes confirmed I was being hit. Almost immediately the screen went blank and yielded to the familiar message: "You have been shot down!"

Shot Down on GEnie

Yep, 3174, call sign Halo, had bitten the dust for the 25th time in a month, against only two kills. Hey, it's a tough world out there, at least in the continuous World War II air battles of *Air Warrior* on GEnie, The General Electric Network for Information Exchange.

Air Warrior is an absolute must for flight simulator addicts. It challenges you with up to 45 live opponents at a time in melees reminiscent of the movie "Twelve O'Clock High." You can fly any of the following eight World War II fighters or three bombers from the 1943-44 time period, the epitome of classic gun-firing propeller-driven aircraft combat: P-51D Mustang, British Spitfire, P-38J Lightning, F-4U Corsair, Japanese Zero, German Focke-Wulf 190, German Messerschmitt 109 or 262 (the lone jet).



A companion World War I theater has four fighters: British Sopwith Camel, German Fokker D.VII or DR-1 triplane, or French Spad S.XIII. Except for flying the multiwingers in the practice mode, I'm saving World War I for later.

Air Warrior's concept is explained in the preface to Version 1.4, November 1988, by its creator, Kesmai Corporation: "Players of *Air Warrior* belong to one of three nationalities. These three small countries are continually at war, primarily waged in the air (though it is rumored they are building armies as well). Each country has several primary airfields and a number of secondary fields, including aircraft carriers in nearby bodies of water.

"Because these countries are so poor, the best they can afford is surplus World War II planes, which their highly skilled mechanics keep in excellent working order despite difficult conditions. They take whatever they can get, be it used American, British, German, or even Soviet planes, stealing them from each other whenever possible. Thus a wide variety of planes are available to pilots of each country. Sometimes even World War I vintage planes show up."

Supporting Atari, Amiga, Macintosh and now IBM-compatible computers, *Air Warrior* is customized to take advantage of each system's capabilities. The preface explains: "Differences in the graphics hardware of the various machines mean that some versions of *Air Warrior* render the 3-D graphical images faster than others. Despite these differences in hardware capabilities, the aerodynamic and combat performance of the different versions is identical."

Tough Foes, High Cost

There are two catches to this precedent-setting simulation: many of your opponents are REALLY good, and the on-line costs can mount up in a hurry, even though GEnie is very reasonable at, for example, $6 an hour for 1200 baud.

During my introductory air campaign, the roster showed 418 participants, and file numbers reached 695 (not all Atari) with all sorts of advice and system enhancements for new and old warriors. The top-

ranking aces boasted scores of 260–53 and 282–127; other notables achieved 69–1 and 40–0. The unlucky included 174–203 and 0–51, demonstrating that experience does not guarantee success.

Going absolutely ape at the prospect of joining my son by modem coast to coast to fight World War II air battles, I soon managed to log 27.77 hours on line for a charge of $138.85 at 1200 baud, and 0.85 hour at 2400 baud for an additional $10.62--total of 28.62 hours and $149.48.

Which (gasp) does not include my telephone bill! If there is a local GEnie number in your area (and if there is, many have surcharges of $2 an hour), you are lucky. If not, you'll face a long-distance charge. The closest GEnie number to Woodbridge is in Herndon. Having thought that was part of our new expanded local calling area (which still costs much more than a pure local call), I happily dialed away until the phone bill came.

How about $83.23 for just calling Herndon from Woodbridge? OK, so I was on the phone 14.26 hours. That's not so much time over a month, usually late at night. And when GEnie had connect problems one night, how about 24 cents for each abruptly terminated connection, i.e. $3.60 for 15 futile calls!

As the shredded pieces of my phone book's long-distance explanation fluttered down over my hunched, brooding self, the following should-a-dones struggled to mind:

- ☎ Precisely determine, in advance, local telephone convulsions and costs to the nearest GEnie telephone number;
- ☎ Determine both GEnie and telephone company times of cheapest charges;
- ☎ Figure what you can afford, then devise an affordable schedule and stick to it.

You might find an ironic surprise similar to mine. The long-distance night rate of our local telephone company to call some 50 miles to Herndon costs about 10 cents a minute while the comparable AT&T long-distance rate for 3,000 miles to San Diego costs only about 13 cents a minute. Such "short" long-distance charges can ambush the best budget.

1200 Baud Best Choice

As for access speed, 1200 baud seems by far the best way to go with GEnie. Text scrolling is readable, and flight simulation is responsive enough. I didn't try 300; in fact, I can hardly imagine trying to fly at 300 baud. I tried 2400 baud only once--I had to dial obvious long distance to the nearest GEnie 2400 line at Richmond, Virginia, and then face a GEnie 2400 baud surcharge of $7.50 an hour (later eliminated May 1) in addition to the $5 an hour 1200 baud charge (which increased May 1 to $6 an hour, still very reasonable).

Sure, 2400 is a little nicer, but the difference in my limited test was nowhere near worth that stiff surcharge. My son in San Diego had talked me into a 2400 baud modem after we tried Falcon via modem and found 1200 baud to be a bit wimpy at jet speeds. In *Air Warrior*, 1200 baud is noticeable mostly in head-on passes where it does lag somewhat even in the relatively slow 600 mph closing rates of two World War II fighters.

Spitfires, FW-190s Dominate

Aircraft are designed to reflect performance differences in speed, firepower, visibility, handling, range, and ability to sustain damage.

Current favorites seem to be the Spitfire and Focke-Wulf 190. P-51s are often seen, P-38s and Corsairs occasionally, Me-109s sometimes. Zeros and Messerschmitt 262s (the lone jet) are rarely flown.

Bombers are slower but able to take more punishment. A fascinating wrinkle is their ability to form crews, taking several other players along as gunners. Bombers are mainly useful for striking airfields and control towers. The primary effect is to deny a country the use of "radar," which is more a ground controller picture of the entire battle area than an airborne tracking device.

With such scope, the best way to appreciate *Air Warrior* to is fly a mission. So here we go. First we get the Air Warrior program. Either buy an earlier version--the Current Notes ST Library Disk #275, *Air Warrior Version 0.8,* for $4--or call GEnie at 1-800-638-9636 to join.

GEnie is often free (including a 44-page "Getting Started" manual) with some modems. Otherwise it's $29.95 including $10 free usage and the $14.95 179-page User's Manual; that's a total value of about $25, so don't feel slighted if you don't get free membership which does not include free usage and the large manual.

Have a credit card number ready, and GEnie usually will activate your membership within a day or two. Client Services is open 8 a.m. to 1 a.m. Eastern time, Monday through Friday, and noon to 8 p.m. Saturday, Sunday, and holidays.

I went the Current Notes route, which is a preliminary version 0.8 that no longer lets you fly online in *Air Warrior* (although it will get you on line to GEnie and other *Air Warrior* menu items) because the upgrade (1.2e, June 8, 1989) has so many improvements. Nevertheless, it's an inexpensive way to look at the concept and, offline, practice flying the airplanes (a few of which have changed, e.g., the Hurricane is now a Lightning).

Check out *Air Warrior* in medium resolution, but then stick to low resolution for more color and supposedly faster operation. Don't be misled by the average graphics or the lack of machineguns or bombs in practice mode. The idea is to let you try the various aircraft, navigate around the grid with its various airfields (including a couple aircraft carriers), and practice landings and takeoffs plus enough manuevers that you're not a sitting duck when you go online in GEnie for combat with people from all over the nation.

First Combat in Air Warrior

Let's say you've joined and practiced, and have accessed GEnie for your first Air Warrior mission. After the opening menu, just type "air" (without quotes). The Air Warrior menu then offers nine choices:

1) Instructions,
2) Enter Air Warrior,
3) Print Scores,
4) Download Software,
5) Air Warrior Convention Information (yes, the Second Annual Air Warrior Convention is July 21–23 in Dayton, Ohio, in conjunction with the U.S. Air Force Museum and Dayton International Air Show),
6) Air Warrior Training Area,
7) Send Feedback to Kesmai,
8) Games Roundtable, and
9) Aviation Roundtable.

Since it's your first time, press 1 for the Instructions. After browsing through them, get back to the menu, then press 2 to Enter Air Warrior. You now are in a general conference room for all three countries. Although dropdown menu choices are available, you might find it easier to get started using the following typed commands.

You can press slash (/) and type "roster" (no quotes) to get a list of everyone playing Air Warrior at the moment, including their country, airfield, and type of aircraft (if members of your country).

New people usually choose Country A. And if they don't select a handle (name) for themselves by typing "/handle" and then the nickname they want, their default name is New Guy--a magnet assuring a great deal of unwanted attention by Country B and C kill-crazy veteran fighter jocks.

So be cool: give yourself a handle that does NOT draw too much attention (even though on radar the enemies will see only your four-digit Air Warrior number), and choose either Country B or Country C by typing "/country B" (or C). Start the action by typing "/goto 1" to go to Theater 1 (there could be two or three World War II theaters in action, depending on the number of players); type "/reserve 1" to reserve a takeoff spot; type "/plane 4" to choose a Spitfire (or whatever number corresponds to whatever other aircraft you want); finally, type "/fly" to find yourself in the cockpit, ready to take off.

Getting Oriented

Press F10 to start the engine, c to rev the engine up in increments (Shift C to go 100 percent), and you're moving down the runway. At about 80 knots, pull back gently on the mouse and you're airborne. Press F9 to raise the landing gear.

Level off so you can press x to engage the autopilot. The X on your screen becomes solid. This greatly stabilizes the fighter so you can check the radar for where the action is. Put your fighter in a gentle climb at between 180 and 240 knots, aiming for at least 5,000 feet before engaging an enemy. Look around by using the four arrow keys. Pressing keys 1 through 5 trades screen detail for screen speed; use 4 or 5 in combat.

Press F2 to see the radar. Default is long range. Press ESCm1 to see medium range, and ESCm0 (zero) for short range. I found medium range to be the most useful most of the time.

The Air Warrior world is an 8x8 grid region showing about 50 miles to a side on the screen, with each sector representing about 12.5 miles. There are four major theaters of operations. Try to stay in Theater 1, where most of the action is.

Diamonds in each radar grid quadrant (from 0 to 7 vertical and horizontal) indicate the number of friendly aircraft. Rectangles represent the number of enemy aircraft. Icons shaped like fighters or bombers are either gray for Country A, green for B, or black for C. ID numbers and ranges to each aircraft are displayed at the bottom of the screen.

You'll be switching back and forth from cockpit to radar by toggling the F1 and F2 keys. Command ESC/nation (press ESC, press /, type "nation") to remind yourself of your country's color and the two opponent country colors. Be sure whom you're shooting at!

Switching back to the cockpit screen, as you approach other aircraft you see black blips at various altitudes, normally about 10 aircraft at a time, prioritized for hostiles. Probably they'll be all over the place --all guided by bloodthirsty little humans like you, looking for easy kills and glory! Remember: keep looking around with your arrow keys. Even as you stalk, you probably are being stalked from other directions.

As you approach within 5,000 yards of other aircraft, their ID numbers (in gray, green, or black) are displayed along with range to each in number of yards. When you get around gun range, about 800 yards, the blips change to a picture of the aircraft, i.e., a Spitfire looks like a Spitfire, not a stick figure.

Some Survival Tips

That's enough to get you started. Now, here are a few survival tips gleaned from my bumbling self-initiation and subsequent study of 10 or so selections (more than 100 pages) from the manual and other files available in Section 4 (Download Software) of the Air Warrior menu:

1. *Air Warrior* is very realistic. For max score and survival, only attack when the odds are in your favor. Try to attack with a bunch of friends. Sneak up on some hostile who's alone or lagging at the edge of a formation. Don't give opponents a chance: blast them from behind whenever possible. If you start getting many hits, go back to your airfield and land to refuel, rearm, and repair. Once you start emitting smoke, you draw bogies like blood draws mosquitoes. (However, frankly I usually ignore a lot of such winning advice and just go blaze away as soon and fast as I can--I prefer max thrill and experience for the money.)

2. Take the time to PRACTICE before you ever log on. Don't attempt combat until you can take off, land, roll, and loop without difficulty. Use the default expert mode for combat maneuvering, and the placid autopilot mode for cruising to altitude and studying radar, as well as landing.

3. Study the manual and then download a couple combat tip files from others who have been initiated the hard way. Don't attempt combat until you know all the controls, and until you've flown several different types of aircraft and found the one you're most comfortable with.

4. If you have to play via long distance telephone, don't call until after 11 p.m.--might as well maximize your bucks. As for GEnie costs, most were reduced substantially in May. Non-prime time, from 6 p.m. to 8 a.m. Monday-Friday plus all day weekends and holidays, costs $5 an hour for 300 baud, $6 for 1200, and $10 for 2400. Prime time rates were reduced from $35 an hour to $18 an hour for all baud rates. Surcharges of $2 an hour still apply for accessing many GEnie lines, but the previous surcharge of $7.50 an hour for a 2400 baud line has been dropped.

5. When you're downloading the latest version, be prepared for about 40 minutes at 1200 baud. It's a big file. It's also compressed, so you'll have to decompress it (you know, the ARC stuff).

6. That initial download will get you started, but there probably is no engine sound in it. You'll have to download that later. It may slow up your combat response somewhat, so you may be toggling it off a lot anyway. Be mentally prepared when you download or capture files in your buffer to be printed out later. I did my initial downloads and captures fine. But in another session, the system aborted the sound download after wasting about 15 minutes of my time and money, and I got confused between buffer and download in files I only wanted to read as text. Made for a miserable and expensive evening of no fun whatsoever.

As for improvements wanted, *Air Warrior* might be more fun if you could use a joystick instead of a mouse. In addition, it would be great to have machine guns and bombs in practice mode, along with a couple targets that smoke and blow up. Just an aircraft towing a target sleeve, as in World War II training, would provide the mildly maneuverable something-to-shoot-at that would greatly improve the odds in on-line combat.

Kesmai promises continuous improvements, and many have been apparent even in the few months I've participated. *Air Warrior* is, indeed, a monumental program; trying to review it is like reviewing War and Peace because the scope is breathtaking and ever-changing--many different things to many different people.

What Price Aerial Glory?

At $6 an hour for 1200 baud, double that if long-distance lines are used (plus GEnie $2 surcharge for some lines), the bottom line question is whether Air Warrior is worth it. Spending $10 or $20 or $50 a month or more for this GEnie attraction could buy a lot of software and hardware. Nevertheless, the answer has to be yes, because this particular on-line interaction is truly another dimension. Even with the best computer-vs.-human simulations, probably all software someday will be considered incomplete unless it includes comparable on-line interaction as an option.

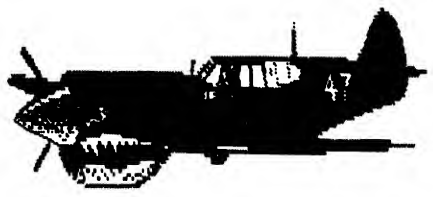
So ... even with long-distance costs, no way could I quit *Air Warrior* cold turkey. I'll sustain the habit with at least an hour every other week (after 11 p.m., natch). And soon Surf and Halo will be in a family flight of four with my 1040ST in Woodbridge, my son's Mega 2 in San Diego, one son-in-law's Macintosh in Chicago, and one son-in-law's IBM-compatible in Falls Church, Virginia.

Meanwhile, when soloing, if I could afford it I'd hang around and form up in groups and gang-attack only when the odds were strongly in my favor. But heck, that's not what sets your neck hairs on end! Instead, jam that throttle to the wall, grab some altitude, and go for that pack of baddies blotting out the screen! After a couple hours experience, you'll find the tactics that suit you best.

But be warned: you'll be hooked. The only thing that will save you from bankruptcy is doing some fancy figuring and incorporating a line called "Air Warrior" into your monthly budget. Cheer up, there are worse addictions. Tell your family you're improving hand-eye coordination at the cost of boggling your mind.

Yet another reality, beyond fiscal, sometimes intrudes even in the most frenzied combat. The other night, as about 20 of us were scrambling for our video lives in a classic Air Warrior furball, one country's leading ace abandoned his buddies with this hastily typed radio message: "Got to go--wife needs the phone."

Available free (except for GEnie per hour charges and any GEnie telephone line surcharges and any long-distance telephone charges) via downloading from the Kesmai Corporation operating on GEnie which is headquartered in Rockville, Maryland. To access GEnie and download Air Warrior files, call Client Services at 1-800-638-9636 from 8 a.m. to 1 a.m. Eastern Time, Monday through Friday, and noon to 8 p.m. Eastern Time Saturday, Sunday, and holidays. When on line, set your terminal at Half Duplex (also called Local Echo), and set your protocol to 8 Bits, no parity, 1 Stop bit (8,N,1). Works in low or medium resolution color. Memory very tight on 520ST. Need ARC to download and decompress files.



Moniterm Viking 2/91

19" Paper White Monitor for the Mega ST

Reviewed by Cory Johnson

Moniterm, Inc. of Minnetonka, Minnesota, has been making large screen monitors for other computers for some time now. The Viking, with a suggested retail price of $2,195 (with anti-glare screen), is their first product for the Atari ST. The only word to describe the Viking is spectacular.

The Viking has a 19" paper white screen with a resolution of 1280x960--twice as many pixels wide as the Atari SM124 monochrome monitor, and over twice as many high. The 19" screen allows two letter size pages, or a B size architectural drawing in actual scale. The non-interlaced screen is remarkably sharp, and completely jitter free.

Included with the monitor is a video board which is installed in the expansion slot of the Mega ST. The board does not extend the expansion port, but it does allow for the addition of a Motorola 68881 math coprocessor for applications such as *DynaCadd*. Unfortunately, the size of the video board prevents installation of the Supra internal hard disk drives or the CMI 16 megahertz accelerator. I am not sure if there will be enough clearance to install *pc ditto II* or any of the other 16 megahertz accelerators into a machine running the Viking monitor. Installation of the board itself is very simple, and shouldn't require a great degree of technical expertise, although the Mega must be opened, which will void the Atari warranty.

The video board extends across the entire left hand side of the Mega and ends with a separate video port for the Viking monitor. This allows the SM124 monochrome monitor to remain on the system along with the Viking monitor, although the SM124 will only display a blank screen when the Viking monitor is in use. The current version of the Viking monitor actually requires a SM124 to remain plugged in the Mega to toggle the ST's monochrome detect. Future versions of the Viking monitor should include a dummy plug, eliminating the requirement of the smaller screen.

The Viking monitor requires TOS 1.4 in order to run. Although Moniterm supplies 1.4 on disk, this will remain inconvenient until Atari finally releases the 1.4 ROMs to the general public. Not everything will run on the Viking monitor. In fact, anything which presupposes a maximum screen size of 640x400 will not run. A few applications will locate themselves in the upper left corner of the screen, but this is the exception; most simply bomb. Programs which I have been able to run on the Viking include: *Calamus, DynaCadd, LDW Power* (version 1.1), *Timeworks Desktop Publisher*, and *Easy Draw* (version 2.03).

Touch Up and *PageStream* are supposed to support the large screen, although I have not had the opportunity to experiment with either. *GDOS* and *G Plus* will both run on the Viking monitor, as long as they are executed early in the AUTO folder. If *GDOS* runs after the Moniterm screen utilities, a 640X400 screen is displayed in the upper left corner of the Viking screen. I have also used *Word Writer ST* on the large screen, but when a window is expanded to full size vertically *Word Writer* displays false page breaks. There seems to be no problem with multiple windows in different locations with *Word Writer* on the large screen. *WordPerfect* does not currently support the Viking monitor.

Most of my experience with the Viking monitor has been desktop publishing with *Calamus* and *Timeworks DTP*, as well as a small amount of CADD work using *DynaCadd*. The combination of the large screen and these programs makes the Mega ST shine as a professional work station. The Viking monitor and *Calamus* perform flawlessly together, and the results are fabulous. It is now possible to have true WYSIWYG (What you see is what you get) on an actual size page, as opposed to the typical zoom out to full page for a "where you see is where you get display" typical of publishing programs on the smaller monitor. The size of the Viking monitor allows magnifications of 500% and more, while still displaying enough of the page to allow reference points when placing text or drawing. The difference between the large and small screen is like the difference between floppy drives and hard disk drives. It will spoil you very quickly. The Moniterm Viking monitor is an absolute necessity for anyone using the Atari ST for professional desktop publishing or CADD applications.

Cory Johnson is well on his way to becoming a professional college student. Currently working for Wizard's Work, the Atari Business Computer Center in Minneapolis, Minnesota, he enjoys playing with desktop publishing systems at work, and when between adventures, playing Tetris at home.

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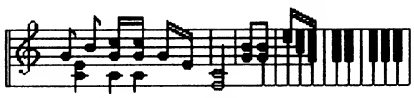
MIDI on the ST



by Lee Whitman

NAMM Show News

Some manufacturers are calling this June's NAMM show the "WAKE AT THE LAKE." I would not say it was that bad, but attendance was way off. My associate described the attendance as follows "you could look down the isles between the booths and see the end of the building since not that many people were in the way." But, the ATARI booth was crowded.

New software and hardware were being shown. *C-Lab Creator* and *Notator* were being shown in their latest versions. *Notator* at $595, now has the facility to draw the split point with the mouse. This is a real time-saving feature. Almost all the other software requires you to pick the split point such as 'middle C' and send all the notes above it to the treble clef and all the notes below to bass clef. If this single split point method is used, then you must spend a lot of time doctoring up the score one note at a time to produce a proper piano chart, for instance. This note separation feature will help in extracting solo parts, such as for brass ensemble.

Notator also will output to the HP Deskjet and the output is of very high quality. The notes, text, and ties are well formed with almost no jags. The output is acceptable for all uses except book publication. The program also has automatic formatting of the score in relation to the lyrics as well as automatic setting of the note heads for drum notation.

Notator is the most sophisticated notation software for the ATARI, offers the most features, and is also one of the most expensive at $595.

The UNITOR (a SMPTE/EBU Synchronizer, Midi Expander also from C-LAB) plugs into the cartridge port and lets you sync to tape (audio and video) or film. Besides reading and writing all formats of SIMPTE, it allows you to tap time; then it will learn the time you tapped. Also the two added midi in ports allow the keyboardist, the drummer, midi guitarist, and midi wind player to record "Direct to Disk" via the midi merge function they perform.

HYBRID ARTS has passed distributition of its software to one or more distributors and this should help the company to concentrate on software development. Their $575 SIMPTE TRACK is an excellent hardware-software combo with the SMPTE I/O plugging into the cartridge port. If you don't need SMPTE, then you can now get just the program w/o timecode for $195; the name is EDIT TRACK. This software has some very nice features, like being able to easily quantize a track without having to save the origional unquantized track to a buffer. Also, the nonvolatile merging of multiple tracks, quantized and original, is done easily. Edit Track allows you to create a 'tempo rack' with different tempos for each measure. Some of these features and functions are also available on HYBRID ARTS EZ TRACK for $69; tempo rack is not.

TOS 1.4

If you really want TOS 1.4 now, then call me and I will send it to you on disk. BUT, there's a catch; it will cost you 200k of precious ram every time you boot it up, so you will only be able to use it sometimes, unless you have a mega or the "NEW WORLD BOARD."

TOS 1.4 is nice, faster, with more features and something to look forward to in permanent ROM's. "How far forward?" Several months, at least, and probably to the 1st of the year. The head of the Atari service dept. did not have any for dealers as of July 1, and it looks like only developers with a Moniterm will get them for a while. The Moniterm requires TOS 1.4. P.S. I would like to put it up on the BBS but don't have permission to.

New World Board

From the reports that I had gotten, this was the one to get for upgrades. It is distributed by BEST Electronics and available at your dealer's for $139 plus installation. The documentation that comes with the board is lacking in some areas. Like the pin outs for the MMU chip which requires you to solder 7 or so leads. We now have a much better print if you need it. Also in an upgrade to 2.5 megs on a 520 you will need to put the new chips into bank (1). Concerning the ribbon cable jumper, you will need to carefully solder the four corner legs to each of the chips. I first tried the upgrade on one of the new working 520/1040 boards with 512k ram and the RF modulator (Ram chips up front under the keyboard). This particular machine would not work with the mem upgrade nor would it work with the blitter chip installed so I took it out and now I have a baby 520 (no built in disk drive model) that has 2.5 megs. The only drawback with the board is that you waste 512k of memory with a 1040 going to 2.5 and, all the on board memory with a 4 meg upgrade.

One Hot Chip

Since this column is about MIDI on the ST. . . . I had a unit fail lately and it was the small 14 leg buffer inverter for the midi that cooked. It had shorted closed, gotten very hot and tied up the buss so that the diagnostics were inaccurate. The chip was under the power supply next to the rams so I did not notice it getting hot until after removing 16 ram chips before I felt the hot faulty chip that was under the power supply. I think it was caused by a midi cable or cartridge being bumped. The faulty chip # is 74LS05, cost 1.95.

Another recent development is the **LAN via the midi ports**. Somebody in the business world has finally figured out what to do with them. How about a complete working LAN for less than $200. I will review this as soon as I can.

Mega Touch

Firm Up The ST Keyboard

by Roger Abram

I'll never upgrade to a Mega. My ST suits my needs adequately and I couldn't afford one anyway. I opted for what I thought would be the next best thing: Mega-Touch, a package of "95 specially engineered plated Steel-Alloy key stiffeners" (springs). The packaging claimed it would make my ST feel like a Mega.

Installation was simple and it only took 53 minutes to methodically remove all the keycaps and then install a stiffener under each key. There are only three keys that the documentation does not recommend you install a key-stiffener under: the space bar, the return key, and the lower left shift key. Although stiffeners are included for them, these keys are somewhat harder to replace because they are secured differently than the rest. Also, no springs are included for the function keys.

Removal of each key is easy as you simply place a flat tool (screwdriver, butter knife) under the front of the key and then lift up. To guide the key and prevent damage to the post, place a finger behind the keycap so that it comes straight off and not at an angle. A keycap puller is a handy tool but it's not necessary for the job. Once all of the keys are removed, you can clean out the debris that has accumulated over time.

Do you need MegaTouch? Unless you prefer extremely stiff keys, the answer is no. It's been over two weeks now since I installed MegaTouch and each time I sit down to do word processing I tell myself that I'm going to remove the stiffeners. I've had my ST for over three years and I've had to dramatically alter my typing habits to compensate for the extra force now necessary when using the keyboard. If at all possible, try it before you buy it.

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Populous

In A Hall Of Fame Game Dueling Deities

Review by Peter A. Smith

An Unusual Simulation

"The empire of the evil one's followers stretched across the plain. He used his dark powers to cause great volcanoes to erupt among my people, killing them and forcing them to flee ever higher into the mountains. They looked to me for help, but my plans would not yet allow me to help them. I was attempting to conserve enough manna for one final counter-attack, but would my followers survive? The plain was covered with castles flying the evil red flag; meanwhile my blue flag, the symbol of all that is Good, hung limply over a few mud huts and wooden buildings.

But my followers held out, and through their devotion lent me strength in the form of manna. Just as it seemed that nothing would stop the empire of evil, I unleashed a great flood, which covered the plain! The evil one frantically tried to raise the land to save his devotees, while I sheared the tops off of mountains to allow my followers to multiply and grow stronger. Suddenly, the balance of power between good and evil had swung to my favor. It would be a long battle, but I knew my followers would prevail."

It had to happen. Computers have let us play at being starship captains, jet fighter pilots, submarine officers, generals, and world leaders. Now, the ST will let you play at being a deity.

The game is *Populous*, and it comes to us from Electronic Arts U.K. As of this writing, it is available only as an import, but according to the rumor mill, EA USA is preparing a domestic release. I paid $49.95, but as with all imported software, the cost can vary widely. *Populous* comes on one single sided disk (actually, if used on a double sided drive, you can listen to music during the demo mode--no big deal) and is heavily copy protected. The game was written by BullFrog, the same folks who did *Fusion* (also from Electronic Arts U.K.).

Have Your Ever Had A Chance To Play God?

Unusual Documentation

So what do you get for your hard earned dollars? Inside *Populous*, you will find loading instructions in three languages, the Populous disk, and a 28-page manual. This last is amazing for an import, as game software from across the Atlantic often has very little documentation. The documentation is complete, very helpful and covers everything you need to know to play, and little else (i.e. there is no inane 'mood setting' story to muddle your way through).

Another surprise awaits when you boot the disk. Bullfrog has included a tutorial mode to further ease your trip up the learning curve. Other goodies include a two player mode (via 'datalink' or modem) and a map painting utility in case you ever get tired of the 500 worlds included. Also, there are a myriad of options (reportedly 60, though I haven't counted) under your control, including aggressiveness and speed of the computer player. Be assured, this is a game that you will not soon conquer.

The main mode of play in *Populous* is Conquest. Here, you are given a scenario (the first called Genesis), including map, options, and speed and skill of the computer player. Should you defeat the computer, you will be given the name of a more difficult world. At any time you can attempt to gain dominion over any world you know the name of; more realistically, you will spend most of your time battling in the most advanced world available to you. Each world is numbered, so you know where you are in your struggle for the 500th world. You won't need to play each world, however; a decisive victory will allow you to skip over several worlds.

In order to win, your followers (Walkers, they are called) must kill all the enemy Walkers. You can exert influence over your Walkers, but you cannot directly control them. Each side has a special Walker called the Leader, and your control is a bit more direct over your Leader. You start the game with one to three Walkers, one of which will be your initial Leader.

An Unusual Layout

Gameplay takes place on a single screen. Here you have the Book of Worlds (an open book, the top page of which shows a map of the entire world), a Close-up Map (where you actually interact with the

game), a Manna bar (which is actually 3 bars, with an arrow sliding along its length; this arrow shows how much manna you have accumulated), a Shield (each quadrant of which shows a different bit of information on your followers or the enemy), and lastly, a panel of Command Icons (which appears to be the tiled floor on which all the others rest; each tile is actually an icon). This layout is absolutely gorgeous, and really shows the extra lengths that the Bullfrog team will go to in order to insure a really first class product.

Rather Unusual And Complex Gameplay

Now comes my greatest challenge as your humble reviewer. I must attempt to accurately describe gameplay. First, your goals are twofold. You must build up your Walker population, and then you must wipe out the enemy. Your most direct control is over the very earth upon which your Walkers trod. A Walker can settle on any flat space. Unfortunately, most of the land is rather hilly, so your task is to flatten it. Using the mouse, (all control is through the mouse) you right click on a hill, and it is instantly flattened. Conversely, left click on a hole and it will be filled. Doing this, you can create large flat areas for your Walkers to live on, or dig moats to keep the evil Walkers away. Your reward for this will be a thriving population of devotees.

Settle, Gather Together, or Fight

All this digging and filling in uses Manna, and you must watch your levels. Manna will flow to you faster as your Walkers multiply, so it is important that they have ample land to settle on. Conversely, you must do what you can to keep the evil population as small as possible.

In addition to raising and lowering land, you can direct your Walkers to either settle, gather together, fight, or go to the Leader. Settle is a kind of normal mode. All Walkers will settle, build houses, and multiply, whereupon the cycle continues. Gather together will cause your Walkers to combine to form stronger (albeit fewer) Walkers. Fight will cause your Walkers to move towards any enemies within range, and do battle with them. Go to the Leader takes a bit of explanation. Each side has a 'Papal Magnet' that the player can place wherever he feels is appropriate. When Go to Leader is selected, the Leader will march towards the magnet, and the Walkers will follow the Leader. Thus, to initiate a war, you would place the magnet in enemy territory, and select Go to Leader. This would cause all your Walkers to head for enemy terrain, whereupon you would choose Fight.

> like Empire, cerebrally addictive.....

Prefer An Earthquake, Or A Flood?

As your Manna grows, you can access some offensive abilities. These are normally used against the enemy. They take the form of disasters, and you can plague his Walkers with Earthquakes, Swamps, Volcanoes, or Floods. All are disruptive and deadly. But be sure, in the higher levels, he can use the same powers against you. Other offensive options include Knight, which transforms your Leader into a rampaging Knight. You have no control over a Knight, it just charges towards the enemy, slaughtering all that it can, until at last it is killed. Finally (no pun intended) there is Armageddon. Once a player has selected Armageddon, both players lose control of the Walkers, who will meet in the center of the world and fight until one side is gone.

Real Time Play

Now for the kicker. While you are deciding whether to raise or lower land, how to deal with that volcano, and wondering where in the heck your knight went, your opponent is busy setting you up for the next big disaster. You see, *Populous* is played in real time. The faster you can think, and click, the more you can get done in a given time period. There are no turns, play is simultaneous at all times. (However, there is a pause feature in case the phone rings, or something.) A typical game can last from 1–2 hours, but it will seem like a few minutes. Still, you are given the option of saving a game in progress.

A Hall of Fame Game

Populous is very difficult to describe, and I fear I have not done it justice. I can find very few faults with it. Sometimes, the computer player will do something pretty silly, like Flood himself out of existence, but then, sometimes you really need a break like that. The closest comparable product that I can think of is *Empire--Populous* has that same kind of cerebrally addictive quality. *Populous* has joined the likes of *Empire* and *Dungeon Master* in my personal Software Hall of Fame. I urge you to give it a try.

[Populous, by Bullfrog, Electronic Arts U.K. $49.95, Color only.]

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WANTED: Chess by Parker Brothers, chess fanatic needs this program to complete collection, will pay fair price. Call (701) 422-3436 or write Dave Harris, Box 241, Selfridge, ND 58568.

FOR SALE: ST Software - *Laser C* v2.0 and *Laser DB* $120, *Mi-Term* $15, *G.I.S.T.* $15, *Sundog* $10, *SuperBike Challenge* $10, *Super Cycle* $10. Hardware - Avatex 1200 Modem $55, SF354 SS Disk Drive s$65, MIDIMIX-6 $20. Books - Prog. in ANSI C, Topics in C Prog., Advanced C Tips & Techniques, $10/ea or 3/$25. Antic magazines (20 from 86-88, min 5), $1.50/ea or 10/$13. Shipping is included. Call Harry Wootan, (205) 988-6592 day, (205) 979-9949 home. Leave msg.

SELL OR TRADE: *BBS Express ST* $20, *Space Quest I* $6, *Techmate* $6, *Goldregons Domain* $15, *Manhunter* $20, *Kosmic Krieg* $10, Diamond DOS cartridge with Paint Program $50 (8 bit), 800XL $50 (excellent condition), Covox Voice Master Jr., $20. All prices include shipping. Robert Reitz, 218 N. Fourth St., Sunbury, PA 17801. Daytime phone (717) 286-5901.

FOR SALE: Atari 800XL, 2-1050 disk drives, XM301 modem, Star Gemini 10X printer w/ interface cable & new printhead, *Syncalc, Synfile, Synstock, KYAN Pascal, Ataniwriter, Printshop & Icons,* 50+ disks of games and utilities, 3 joysticks, etc. Prefer to sell complete package $375, or will sell pieces. (703) 830-2364 after 6pm EDT.

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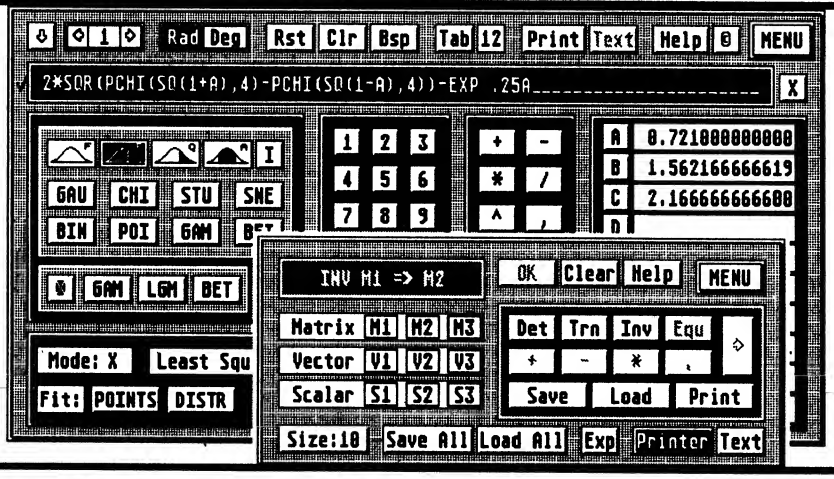

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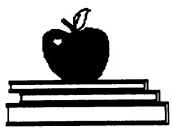

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WAACE CLUB CORNER

This space is made available to WAACE member clubs for publicizing activities. Material for this column must be in the hands of the Clubs Editor by the 3rd of each month. Send copy to Ed Seward, PO Box 2699, Merrifield, VA 22116. Material can also be uploaded to the ARMUDIC BBS.

NOVATARI: Northern Virginia Atari Users' Group

President	Bonnie Little	703-444-2419
ST VP	Ed Seward	703-573-3044
8bit VP	Nina Kraucunas	703-250-3572
Secretary	Edmund Bedsworth	703-591-5958
Treasurer	Gary Purinton	703-264-8826
ST Librarian	Frank Chan	703-960-0474
8-bit Librarian	Roy Brooks	703-750-0146
8-bit mail	Jeff King	
ARMUDIC Sysop	Scott Ogden	703-450-3992

New Members: Dues are $24/year/family which includes a subscription to CURRENT NOTES and access to more activities. Join at the main meeting or at a chapter meeting or by sending $24, payable to NOVATARI, to NOVATARI, PO Box 4076, Merrifield, VA 22116.

Novatari Main meeting: second Sunday of the month at the Washington Gas Light Building, 6801 Industrial Rd, Springfield, VA. Take 495 to east on Braddock Rd.(620) to south on Backlick Rd (617). Left on Industrial Rd. Washington Gas Light is the second building on the right. 5:30 Programmers SIG; 6:15 announcements, open forum, door prizes; 6:45 VAST and 8BIT SIG meetings.

Chapter Meetings: Mt. Vernon/Hybla Valley, 1st Thursday, 7:30 Contact Ron Peters at 780-0963. Sterling, Sterling Library, 7:30-9:30, Wed after the Second Sunday Contact Richard Gunter at 471-7765. Vienna, 4th Sunday, Contact Ed Seward 573-3044 for time and place.

A.U.R.A.: Atari Users Regional Association

President	Niel Johnson	301-540-1794
8-bit VP	Steve Preston	301-972-9632
16-bit VP	Ira Horowitz	301-421-9507
Treasurer	Bob Brock	301-268-2554
Membership	Bill Brown	301-279-7537
8bit Librarian	Wayne Heiden	301-330-0130
16bit Librarian	Joe Russek	301-946-7593

Meetings: Third Thursday of each month in the Multipurpose Room at GRACE EPISCOPAL SCHOOL. The school is on the east side of Conecticut Avenue, 1/4 mi.north of the Connecticut Avenue (North) Exit from I495. Library and swap table sales begin at 7:15, the meeting begins at 7:30. We have separate XL and ST demonstrations. There will be 8-bit and 16-bit door prizes.

Correspondence. All correspondence, including membership renewals, changes of address, etc. should be sent to: AURA, P. O. Box 7761, Silver Spring, MD 20910.

New Members. Dues are $25/year and include subscription to CURRENT NOTES. Send name, address, phone number, and check to above address.

F.A.C.E.: Frederick Atari Computer Enthusiasts

President	Chris Rietman	301-791-9170
Vice President	Mike Kerwin	301-845-4477
Treasurer	Buddy Smallwood	717-485-4714

Meetings: 4th Tuesday, 7 - 9:30 pm, Walkersville HS, MD Route 194, 1 mile north of MD Route 26 (Liberty Road). July and August meetings will be held at St Paul's Lutheran Church, 14 W. Pennsylvania Ave, Walkersville, MD.

New Members: Dues are $25/year/family and include a subscription to CURRENT NOTES. Join at meeting or send check, payable to FACE, to Buddy Smallwood, PO Box 2026, Frederick, MD 21701.

G.R.A.S.P.: Greater Richmond Atari Support Program

President	Mickey Angell	804-744-3307
Vice President	Terry Barker	804-379-8175
Secretary	Tom Marvin	804-233-6155

Meetings: 2nd and 4th Thursday, at La Prade Library, 2730 Hicks Rd.

Dues: $20 per year (no CURRENT NOTES).

WACUG: Woodbridge Atari Computer Users' Group

President	Lou Praino	703-221-8193
VP	Ron Dunn	703-494-4260
8Bit VP	Darrell Stiles	703-494-9819
ST VP	Bill Parker	703-680-3941
Treasurer	David Waalkes	703-490-1225
Librarian	Frank Bassett	703-670-8780

Meetings: 7-9PM, Community Room, Potomac Branch, Prince William County Library, Opitz Blvd., Woodbridge, VA. Entering Woodbridge from either North or South on Route 1, proceed to the intersection of Route 1 and Opitz Blvd. (opposite Woodbridge Lincoln-Mercury). Turn West on Opitz and take first left turn into the library's parking lot. The Community Room is located toyour left immediately upon entering the main building.

New Members: Initial membership fee is $10 plus $1 monthly dues. Renewals are $20 per year, payable as of 1 January. Membership includes a subscription to CURRENT NOTES. Join at meeting or send check, payable to WACUG, to David Waalkes, 1302 Oregon Ave, Woodbridge, VA 22191.

M.A.C.C.: Maryland Atari Computer Club

President	Jim Hill	301-461-7556
Vice President	Dan Honick	301-356-6453
Treasurer	John Cromwell	301-356-6453
Secretary	Bob Brent	301-254-3896
8bit Librarian	Jim Hill (acting)	
ST Librarian	Tim Caldwell	301-687-1413
Newsletter Ed	Charles Smeton	301-465-8628

Meetings: last Tuesday, 6:30 pm, Pikesville Library, 1 mi. east on Reisterstown Rd from Exit 20 off the Baltimore Beltway.

New Members: Club Dues are $22/year and include a subscription to CURRENT NOTES. Join at meeting or send check, payable to MACC, to James Hill, 8591 Wheatfield Way, Ellicott City, MD, 21043.

M.A.S.T.: Meade Atari ST Users Group

President	Bob Johnson	301-674-8762
Vice Pres	Keith Drewke	301-551-2662
Secretary	John Corkran	301-255-1674
PD Librarian	Harold Beck III	301-672-1793
Tangent Line BBS	Thomas Hutchinson	301-850-5045

Meetings - Third Tuesday of each month at the Province Branch Library at the intersection of Ridge Rd/Rochenbach Rd and MD 175 in Odenton at the rear of the Severn Square shopping center. The meetings run from 6:30 to 9:00 pm.. Call Bob Johnson any evening for further information.

Mailing Address: All correspondence, including membership renewals, changes ofaddress, etc. should be sent to: MAST, c/o Bob Johnson, 1616B Forrest Ave, FtMeade, MD 20755.

New Members. Dues are $27/year and include subscription to CURRENT NOTES and unlimited DL and message activity on the Tangent Line BBS. Send name, address, phone number, and check to above address or join at any meeting.

WAACE GOINGS ON

John Barnes, WAACE Chairman

Waace AtariFest 89

AtariFest '89 is coming down to the wire. To keep up to date check in on the AtariFest SIG (Sig 4) on ARMUDIC. This special area contains messages that are suitable for uploading to other BBS's and for inserting into news media that you have access to. Please beat the drums for AtariFest '89.

Download the worker list to make sure that your User Group is properly represented. Call the chairpersons for the various activities so that they will not be in a panic at the last minute.

The news report on the Fest elsewhere in this issue tells just how exciting this Fest is going to be. Johnna Ogden has had her hands full lately keeping in touch with vendors who have committed to the Fest. Bob Johnson and Gary Purinton are preparing display advertising for the final phase of our advertising campaign with calendar notices to all of the local papers and a lot of pep talk on the BBS's. Steve Rudolph's team will be putting the finishing touches on the souvenir program for the Fest in a week or two.

WAACE membership

At its 27 July meeting the WAACE Board determined that SMAUG, the Southern Maryland Atari User Group, had not met the criteria for continued WAACE membership and that their membership in WAACE should be terminated. The criteria for membership in WAACE are designed to guarantee a viable confederation of user groups working toward the common goal of educating the public about Atari Computers. With recent declines in membership some of the smaller groups have experienced difficulty finding the resources to support the AtariFest.

During 1989 we have taken in one new user group. If your user group meets the criteria for WAACE membership, encourage your officers to start the process now so that you will be full fledged participants in the 1990 AtariFest. The WAACE Constitution can be downloaded from ARMUDIC in case you have questions.

NOVATARI

by Ed Seward, NOVATARI ST VP

For those of you who haven't heard, we have changed the software and part of the hardware used to operate the BBS. Instead of the Nite Lite software and hardware we are using special versions of the Double-Click Port and Michtron BBS to run a five line BBS. While this reduces the number of lines available by two it greatly improves the reliability of the BBS and its ease of use by both the Sysop and the callers.

Due to the increased amount of information contained in the password records of the Michtron BBS over those in Nite Lite it was decided to have everyone reapply – that being the reason everyone has had to fill out a password application on their first call after approximately June 24th.

A reminder that BBS dues are $5/year for NOVATARI members and $7.50/year for other user group members. This can be paid at NOVATARI meetings or sent to the address shown below. This allows unlimited downloads and up to 6 hours of online time per day.

The other important point to cover is that we need more volunteers from within NOVATARI to assist with the ATARIFEST. So please get in touch with the person running the area you are interested in or one of the NOVATARI VP's.

WAACE Calender

September

SEP 10	NOVATARI Main Meeting
SEP 13	Sterling Chapter of NOVATARI
SEP 21	AURA Meeting
SEP 26	FACE Meeting
SEP 26	MAST Meeting

October

OCT 7	1st day of ATARIFEST
OCT 8	2nd day of ATARIFEST
OCT 15	Sterling Chapter Meeting
OCT 16	AURA Meeting
OCT 11	Sterling Chapter Meeting
OCT 19	AURA Meeting
OCT 24	FACE Meeting
OCT 24	MAST Meeting

November

NOV 12	NOVATARI Main Meeting

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Access to the BBS requires a fee of $5/year for NOVATARI members and $7.50 for members of other user groups. BBS access fees are to be made payable to "NOVATARI" and sent to: NOVATARI, PO Box 4076, Merrifield, VA 22116.

Current Notes' Registered Atari Clubs

Members of registered clubs may subscribe to Current Notes at a discount rate ($20/year or $38/2 years). To add your club to the list, send an initial subscription list of 10% of the members or 6 members whichever is less, to CN Registered Clubs, 122 N. Johnson Rd., Sterling, VA 22170. For more information, call Joyce (703) 450-4761. NOTE: Canadian Atari clubs are also eligible. Canadian club subscriptions are $28/year or $54/2 years)

ALABAMA

Huntsville AUG, Levin Soule, 3911 W. Crestview, Huntsville 35816 (205) 534-1815.

ARIZONA

Tucson Atari Central, Sam Furrow, 2116 E. 1st St, Tucson, 85719 (603) 323-3410

ARKANSAS

Little Rock Atari Addicts, Keith Steensma, 28 John Hancock Cir, Jacksonville, 72076 (501) 985-2131.

CALIFORNIA

Atari Bay Area Computer Users Society, Bill Zinn, PO Box 22212, San Francisco 94122 (415) 753-8483.

San Diego ACE, Mark Lawless, PO Box 203076, San Diego 92120 (619) 581-2477.

Santa Maria/Lompac ACE, Mike Jacobson 608 N. Pierce, Santa Maria 93454 (805) 925-9390.

CONNECTICUT

Atari User Group of Greater Hartford, 503-B East Center St, Manchester 06040 (203) 623-8833.

ST Atari Road Runners, Glen Werner, 1160 South Curtis St, Wallingford 06492.

ST Atari Users Society, Brian Rufini, 176 Burnside Ave, E. Hartford 06180 (203) 289-7903.

FLORIDA

Atari Boosters League East, Hadley Nelson, P.O. Box 1172, Winter Park 32790.

ILLINOIS

Central Illinois Atari Users Group, Robert Handley, 1920 East Croxton Ave, Bloomington 61701-5702 (309) 828-4661.

Lake County ACE, Dwight Johnson, PO Box 8788, Waukegan 60079 (312) 623-9567.

ST Information Group, Joe Lambert, P.O. Box 1242, Peoria, 61654 (309) 346-4326.

INDIANA

Atari Lovers of Illiana Equaled by None, Jeff Coe, 706 Center St., Crown Point, 46307 (219) 663-5117.

Eli Lilly Corp Center ST Users Group, Karl Werner, Eli Lilly Corp Cntr, Indianapolis 46285 (317) 276-3020.

IOWA

Midwest Atari Group-Iowa Chap, Gordie Meyer, PO Box 1982, Ames 50010 (515) 232-1252.

KANSAS

Ft. Leavenworth Atari Group, PO Box 3233, Ft Leavenworth 66027.

Lawrence Atari Comp. Club, Robert Drake, PO Box 1415, Lawrence, 66044 (913) 842-5961.

Wichita ACE, Marilyn Merica, 501 Trotter, Maize 67101 (316) 722-1078.

KENTUCKY

Atari Exchange of Louisville, Don Garr, PO Box 34183, Louisville 40232.

LOUISIANA

Only ST Users' Group, William Sammons, 2144 Emerson St, Gretna 70056.

MARYLAND

Atari Users Regional Assoc, Bill Brown, PO Box 7761, Silver Spring 20910 (301) 279-7537.

Frederick Atari Computer Enthusiasts, Buddy Smallwood, PO Box 2026, Frederick 21701 (717) 485-4714.

Maryland Atari Computer Club, James Hill, 8591 Wheatfield Way, Ellicott City 21043 (301) 461-7556.

Meade Atari ST, Bob Johnson, 1616B Forrest Ave, Ft. Meade 20755

Southern Maryland Atari Users Group, San Schrinar, 2032 Alehouse Ct, Waldorf 20601 (301) 843-7916.

MASSACHUSETTS

Acton-Boxboro Atari Computer Users Society, Dave Burns, PO Box 1523, Westford 01886 (508) 937-8046.

MICHIGAN

Michigan Atari General Information Conference, (MAGIC), Mike Lechkun, 4801 Martin Rd, Warren 48092-3491.

MINNESOTA

SPACE/MAST, James Schulz, 3264 Welcome Ave., N., Crystal 55422 (612) 537-5442.

MISSOURI

ACE St Louis, Joan Ryan, PO Box 6783, St. Louis, MO 63144 (314) 645-6431.

Warrensburg/Whiteman Atari Computer Owners, Les Lynam, PO Box 199, Warrensburg 64093 (816) 747-2543.

NEW JERSEY

Jersey Atari Computer Group, 8 Crescent Rd, Pine Brook 07058.

NEW YORK

ACE Users Group of Syracuse, Bernice Futterman, PO Box 658, Sylvan Beach 13157 (315) 762-4878.

Atari Computer Owners of Rochester NY, Kathy Scoville, PO Box 23676, Rochester 14692 (716) 354-5513.

Capital District ACE, Joe Bogaard, PO Box 511, Delmar 12054

Rockland Atari Computer Users Group, Richard Bloch, 29 Riverglen Dr., Thiells, NY 10984 (914) 429-5283.

NORTH CAROLINA

Blue Ridge Atari Computer Enthusiasts, Bill Traughber, 106 Alpine Way, Asheville, NC 28805 (704) 298-0179.

Charlotte AUG, Joe Venturelli, PO Box 240313, Charlotte 28224 (704) 366-4320.

Peidmont Triad AUG, Nora Schwier, PO Box 1073, Greensboro, 27402 (919) 674-9196.

Triangle Computer Club, Donald Nelson, Rt. 3, Box 760, Hillsborough 27278 (919) 942-2764.

OHIO

Cleveland ACE, John Savarda, PO Box 93034, Cleveland 44101-5034.

Miami Valley ACE, Bruce Hansford, P.O. Box 24221, Huber Heights, 45424 (513) 439-1993.

PENNSYLVANIA

Allentown Bethlehem Easton's ACE, PO Box 2830, Lehigh Valley 18001 BBS 215-759-2683.

North East Atari Team Users Group, P.O. Box 18150, Philadelphia 19116-0150.

Spectrum Atari Group of Erie, Earl Hill, PO Box 10562, Erie 16514 (814) 833-4073.

Southcentral PA ACE, Richard Basso, PO Box 11446, Harrisburg 17108 (717) 761-3755.

SOUTH CAROLINA

Greenville Atari Computer Enthusiasts, Mary Anne Terminato, 18 Bedfrord Lane, Taylors 29687 (803) 292-0280.

SOUTH DAKOTA

Rushmore ACE, Gregg Anderson, 3512 Lawrence Dr., Rapid City, SD 57701 (605) 348-6331.

TENNESSEE

Knoxville AUG, Bill Brosey, 953 Roderick Rd, Knoxville 37923 (615) 693-4542.

TEXAS

DAL-ACE, Rachel Duke, P.O. Box 851872, Richardson, 75085-1872 (214) 429-6134.

ST Atari League of San Antonio, David St. Martin, 3203 Coral Grove Dr, San Antonio 78247 (512) 496-5635.

VIRGINIA

Greater Richmond Atari Support Program, Thomas Marvin, 1420 Yale Ave, Richmond 23224 (804) 233-6155.

Northern Virginia Atari Users Group, Bonnie Little, PO Box 4076, Merrifield 22116 (703) 444-2419.

Southside Tidewater Atari Tech Users Society, Dick Litchfield, 1805 St. Regis Circle, VA Beach 23456 (804) 468-6964.

Woodbridge Atari Computer Users' Group, David Waalkes, 1302 Oregon Ave, Woodbridge 22191 (703) 490-1225.

WASHINGTON

Seattle Puget-Sound ACE, Nick Berry, PO Box 110576, Tacoma 98411-0576 (206) 759-1473.

STDIO, Ralph Plaggenburg, 904 N. 33rd Pl, Renton, 98056 (206) 228-5303.

WISCONSIN

Milwaukee Area Atari User's Group, Dennis Wilson, 3301 S. 93rd St, #108, Milwaukee, WI 53227 (414) 546-0282.

Packerland Atari Computer Users Society, Peter Schefsky, 2714 South 11th Place, Sheboygan, 53081 414-457-4519.

CANADA

Montreal Atari Club Atari de Montreal, PO Box 5418, St. Laurent Station, Ville St. Laurent, H4L 4Z9

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NOVATARI XL/XE PD LIBRARY

DEMO

1. Miscellaneous
2. Movie Maker Clips
3. Heavy Metal Art
4. Miscellaneous
5. Desktop DOS + Demos
6. VizPics
7. Mandelbrot factal graphics
8. Hitchhiker's Guide To The Galaxy
9. Wizard of OZ
10. Adventurers Com–panion
11. **German Sound & Graphics**

EDUCATION

1. Mathematics
2. Primary Language
3. Teachers' Toolbox
4. Word Builder 1.0
5. Animated stories
6. Geography
7. Bio+Chem with touch typing
8. Basic Math
9. Higher Math and Language
10. The Cell
11. Spelling Bee
12. Math Game
13. Word Games

GAMES

1. Text Adventures I
2. Gambling
3. Simulations
4. Mazes
5. Parlour Games
6. Graphics
7. Action! Games
8. Arcade Look–A–Likes
9. Text Adventures II
10. Text Adventures III
11. Surf's Up
12. Ski King
13. 20 BASIC Games
14. Super Quiz A & B
15. 2 Graphic Adventures
16. Space Lords
17. Pinball Games
18. Machine Lang Games
19. Dandy Dungeon
20. Holdem Poker
21. Americas Cup
22. Boulder Dash Const. Set
23. Wheel of Fortune & Backgammon
24. Yankee 21 (Blackjack)
25. Card Games
26. Voyages Through Time
27. Space Games
28. **Paper Airplane Construction Set**

LANGUAGE

1. Fig–FORTH
2. ACTION! source codes (cf. GAMES 7)
3. ACTION! Graphic Demos
4. ACTION! Utility Programs
5. ACTION! Modules #1
6. ACTION! Modules #2
7. BASIC XL–REF Base
8. ACTION! Modules #3
9. KERMIT telecom
10. TURBO BASIC
11. Pascal Sampler
12. Searcher XL Turbo
13. Turbo Basic 400/800
14. C Language
15. Turbo Basic Docs

MUSIC

1. TV/Movie Themes
2. Rock
3. Jazz
4. BASIC with animation
5. 12 Rock Songs
6. 14 Movie/Video
7. 16 Oldies
8. 18 Classics
9. Ram130 AMS Beetles' Songs
10. Music Comp. Songs
11. Pokey Player
12. Music Major

UTILIITY

1. Misc Introduction
2. Printers
3. DOS 2.5
4. Dir & Label Printer
5. Graphics Trilogy
6. Copymate XE
7. SCOPY sector copier
8. Translator Disk
9. 256K Upgrade
10. Daisy–Dot NLQ
11. Dos 2.6
12. MACHDOS 2.1
13. Print Shop Editor
14. Easy Find
15. Print Shop Icons
16. TEXTPRO 1.1
17. Print Shop Icons
18. Touch Edit
19. DOS 4.0
20. Graphics
21. 130XE upgrades + Util.
22. HI–RES 130 (graphics)
23. Rainbow DOS
24. Font Master
25. 3–D CAD
26. Adelaide Symbolic Disassembler
27. DB's & Spreadsheet
28. Graphic Utilities & Pics
29. String Magic
30. Print Shop Icons
31. Hacker's Toolkit
32. Weekly Scheduler
33. Textpro 2.5r (telecom)
34. Print Shop Utility
35. Monitor/Debugger
36. Diet & Nutrition
37. General Ledger
38. Super Copiers
39. Atari Writer Drivers
40. Signmaker 1.3
41. Billboard Maker
42. Daisy Dot II
43. Graphics Art Depart.
44. ARC–ALF Compression Utilities
45. MYCOPR 2.1
46. MYDOS 4.50
47. Pixel Artist Deluxe
48. Atari Ref. Manual
49. Print Shop Icons
50. 1020 Printer Utilities
51. **JIF Version 2.0**
52. **Draw7 (XE only)**
53. **DOS XE**

TELECOMMUNI-CATIONS

1. 850 Interface
2. 835/1030 Modem
3. MPP Modem

4A. Amodem 7.2

5A&B Chameleon Terminal Emulator

6. 1030 & 850 Express
7. Data Comm
8. AMIS XM10 BBS
9. AMODEM 7.4 + Rverter
10. Forem XE BBS
11. Amodem V7.52
12. **Oasis BBS**

The price for mail orders is $3 per disk plus $1 for postage and hand–ling for every 3 disks.

Send checks, payable to NOVATARI, to:

Jeff King,
10033 Clearfield Ave,
Vienna, VA 22180.

Current Notes Magic/Spectre Library

These disks contain Mac programs for use with the Spectre/Magic Sac Macintosh emulators. Disks numbers prefixed with an **M** are for the **Magic Sac** and those with an **S** are for the **Spectre**. Disks numbers followed with a **D** indicate a **Double-sided disk** format.

Note: many of the Magic Sac programs also work with the Spectre 128, but not all. Adventure-type games now **do work** with v1.9 of Spectre with the sound turned on.

Desk Accessories

M8: DAs #1--3DTTT Game, Art Thief, Ascii, Bagels Game, Big Ben, Calculator, CopyFile, DA Tester 1.5, Delete File, Desk Acc. Tester, DeskZap 1.2, Eject&Reset, Extras, File Hacker DA, File Tools, Font Grapper+, Font Grapper3, Hex Calculator, HP 12c, MemScan, MemWindow, MerriMac BlackJack, miniWriter, MockTerminal, MockWrite, Moire, MW Count, Other 3.0, Puzzle, Reader, Rubik's Cube, Sampler, Scrapbook, Scientific Calculator, SetFile 3.3, SkipFinder, TheBox, Tiler 1.5, Trails, Transfer, TrapList, Utils, Word Count, Zoom Idle.

M18: DAs #2--About Popup.txt, Alarm clock, Art Grapper+, Calculator+, Choose Scrapbook+, DA File, DA Tester 1.5, Disk Labeler, DiskInfo 1.45 + SICNs, Explorer, Gone Fishin', Hex Calc, Label Maker, MemWindow, MiniWRITER 1.34, Multi-Scrapbook, MW 4.5 Counter.DA, Popup 1.0, ProCount, ReadiPrinter, Ruler, SFstartup 1.0, Skipfinder 6.1, Sleep, Stars 1.6, Stars II, Sysfonts, TeaTime, Timer.

M46: DAs #3--35 DAs: 3D Tic-Tac-Toe, A-Bus ID Poker, Abacus, Calendar, CheapPaint, Collapse, ConCode, Crabs2, DAFile, DAFont, Disp.Msg, Double Apple, Executive Decision, FatMouse, FixPic2.0, Flow, Fun House, Func Keys, Font, Idle, KeyMouse, KnockOut, Multi-Scrap, MW to Text, New MiniDos, Orig Clock, PaintDA, Poker, ProCount, Ruler, Tiler1.5, Timelogger2.11, Utilities, Wrap, WXModem, Sample It.

Utility Disks

M2: Telecom Disk #1--BinHex 5.0, Free Term 1.8, FreeTerm.Doc, Kermit, PackIt III (V1.3), StuffIt 1.0, TermWorks 1.3.

M3: Utilities #1--DES, Font Doubler, MacDump, Mini Finder, PackIt III (V1.3), Reverse Screen 1.0b1, RMover, Scan, Set File, Slicer. Version Reader 1.1, Write Stream.

M5: Disk Librarian--Disk Librarian V1.82A. Contains listing of CN Magic Library. **

M9: Utilities #2--Bind Icons, Change Appl. Font, Convert Desk Acc., Desk Accessory Mover, File Hacker, FontDoubler, Index,MakeScreen, MicroFinder, PurgeIcons, RamAStart 1.3, REdit, ResEd, SelectPaint, Show Version, User Interface Demo.

M11: Print Utilities--Coventry-12, Disk Labeler, Fast Eddie, Font Mover, Ink, MacWrite 4.5 to Text, miniWriter, MockWrite, Pica-10, ReadMacWrite, Walla Walla-9.

M27: Utilities #3--Browse/Shazam!, Clocks: analog & digital, Edit, FEdit 3.0, launch, lazymenu, Magic Beep 1.0, Menu Ed, microFinder, Quick Dir, Quick Print, RamStart2.0+, Road Atlas, ShrinkToFit, SicnEdit, SortMenu, SortMenu Code, SuperFinder4.0, TabsOut, Unpit, WayStation.

M28: Red Ryder 7.0--Red Ryder 7.0, Red's 7.0 Stuff, RR7.0 Macros,RR Docs.

M43: Utilities #4--DiskDup+, MacSnoop 1.03, RamDisk+ 1.4, ResTools 2.01, Oasis 2.01, Font Librarian, Switch.

Games

M4: Games #1--Backgammon, Bash Big Blue, Curves, MacLuff, MacYahtezee, Maze 3D, Meltdown, Missile Command, Munch, PepsiCas,Smile, Snow, Solitaire, Space Bubbles, Vax Runner II.

M6: Games #2--Ashes, Black Box, Destroyer, HexPuzzle, Killer Kalah, MacPoly Demo, Office Attack, Point Symmetry Demo, Snake, Solitaire, Trophy List, Wall Game, Wheel.

M7: Games #3--Ashes, Break the Bricks, Deep Ennui, Go, Mac Gunner, MacBugs, MacCommand, MacYahtzee, Wiz Fire 1.1

M15: Games #4--Alice, Amps 3.0(B2), Bricks, Canfield 2.0, Iago, Lets Get Tanked!, MacHeads, Nim, Space Attack, Third Dimension.

M20: Games #5--Chase'Em, Crystal Raider, Daleks, Golf MacWay, Kill File, Kill, King, King MacWrite, On-The-Contrary, StuntCopter1.2.

M21: Games #6--Guess, Hacker's Contest, Hot Air Balloon, Match, Ramm1.0, Third Dimension, Trick-Track, Utaan Attack, Zero Gravity.

M25: Games #7--Billiards, Cross Master Demo, Flash Cards, Hangman-9.0, MacLuff, Master Guess, Safari 1.0, Venn.

M30: Games #8--Bowl-A-Rama, MacTrek 1.1, Mystery Box 1.0, Shots, Star Trek Trivia Quiz, Window Blaster 1.0.

M34: Games #9--1000 Miles, Asteroids, Cairo ShootOut!, Donkey Doo, Duck Hunt, Pente 1.0.

M45: Games #10--Blackjack 4.0, Gunshy 1.0, Humpback, New Social Climber, Panic, Puzzle 1.0, Star Trek Trivia Quiz, VideoPoker.

M51: Games #11--Bouncing Balls, Fire Zone, Mac Word Hunt 2.0, Out Flank, Risk and Word Search.

M53: Games #12--3D Checkers 2.0, Bills Casino, BMX-The Racing Game, HeloMath, Mouse Craps.

M58: Games #13--Klondike 3.6, Space Station Pheta, Mac Concentration, Sitting Duck, Hot Air Balloon 2.1, Think Ahead+2.0.

M60: Games #14--Golf Solitaire, Mac Football, Euchre 2.2, Gomoku, Pyramid, Checkers, Runaround and Macpuzzle 1.0.

M19: Pinball Construction Set Games--Player + Games: Apple, Black Hole, Face, KalinBall, Madonna, Minute-Mag, Patchwork Mess, Phantom, Pure-Gemme, Samurai, The Royal Pain, Wizards Lair. **

M29: PCS Games #2--Player + Games: Circus Circus, D &D , Diadora, Max, Merlin, Modern Mistress, Queston, The Royal Pain, Twilight Zone, Whazit. **

Adventure Games

M17: Dungeons of Doom 4.0.

M23: Vampire Castle.

M24: Deep Angst--1 Mb ST only.

M31: Black Wizard.

M36: Castle of Ert.

M40: Hack, V1.03--incl manual w/docs.

M41: Radical Castle.

M63D: Mountain of Mayhem.

M65D: Deep Angst II

M66: Intruder.

Graphics

M10: Graphics #1--Amy, Artisto, ball demo, Big Ben, Brooke, Bugs, Curves, Display Message, Dragon, Fighting 51, Fourth Dimension, GARF, HotSex!, Liar's Club, Living Art, Max Headroom, Moire 3.0, Nightmare, Optical Illusion, Paint Grabber, Painter's Helper #1, Pattern*, Pisces, Rotations, Saddle, The Fourth Docs, ViewPaint 1.5.

M12: MacBillBoard--Chipmunks, Donald & Daisy, Goofy At Bat, Announcement, Babe Ruth, Carrotprint, Classic illusions, Escher, Escher Hands, MacBillBoard (MacPaint clone), Max, Mickey and Minney, mm, Quick Tour, T-Shirt. **

M22: Graphics #2--BlowUp 3.0, BlowUp Notes, CalendarMaker 2.2.1, Dynamo, Graphic, MadMenus, Math21, Rays, Simutree, Spiro, Tree, Vanlandingham.

M26: Graphics #3--3D Sketch, AniRama, Bin/Graphics, Brownian Motion, Control, Fractal Contours, Fractals, Icon Collector, Julia, MakePaint, Melting Clock, Small View, ShapeArt, StarFlight, Window Demo.

M47: Graphics #4--Cursor Designer, Earthplot3.0, Graphics2.0, Mondrian1.0, MotionMaker2.0, Moving Finger, Wallpaper, Zoomation.

M57: Graphics #5--Micro Film Reader 1.4, Bomber, Iliana II, Preview, Super Ruler 1.1, and XVT-Draw.

Font Disks **

M13: Fonts #1--Akashi, AlgBlurb, Algebra, Athens, Boxie, Dover, Geneva, Hood River, ImageWriter, LED, London, Los Angeles, Luxor, Mars, Monaco, Park Ave, Pica, Ravenna, Rome, Runes, San Francisco, Seattle, Steel Brush, Ultra Bodoni.

M14: Fonts #2--Bookman, Courier, Coventry, Dali, Genevaa, Hebrew, Manteco, Shadow Box, Sri Lanka, Times, Walla Walla, and font display 4.6 w/docs.

M16: Fonts #3--Alice, Avante Garde, Berkeley, Broadway, Camelot, Cartoon, Centura, Chancery, Eon, Exeter, Fallingwater, Fantaste Key, Fantaste!, Future, Ham, Helvitica, Hollywood, Lachine, Lineal, Madrid, Pittsburg, San Quentin, Silicon Valley, Stencil, Unicol plus DAFont2.da and SysFonts.da.

M32: Fonts #4--Canberra, Chicago, Humanistic, Music, New Dali, Palencia Application, Palo Alto, Pioneer Shadow plus F/DA sorter and Font Tester.

M35: Fonts #5--Beehive, Beverly Hills, Boise, Chicago, Courier, DeStijl, Ham, Happy Canyon, Helvitica, Mod. Chicago, Old English, Square Serrif, Sri Lanka, Worksheet.

M42: Fonts #6--Berlin, Boston II, Courier, Dorza, Highwood, MicroBoston, MiniBoston, New York, Palo Alto, Sparta, Stiletto, Symbol, Tatooine, Venice, Wartburg.

M44: Fonts #7--42nd Street, Aldous, Art Deco, Ascii, Blockbuster, Border, Clairvaux, Coptic, Deep Box, Ivy League, Klingon, Las Vagas, Little Box, Madrid, Memphis, Minneapolis, Rivendell, Spokane.

M50: Fonts #8--Alderney, Cairo, Cyrillic, Greek, Paint, Playbill, Rehovot, Runes, Washington, Zodiac.

M61: Fonts #9--New Century, Helvetica, Columbia, Minneapolis, Creamy, Palatino, Detroit, and Zap Chancery.

M64: Fonts #10--York, Paint, Miscpix, Icon, Cupertino, Arabic, Fallingwater, Schematic, Moscow, and Isengard.

M67: Fonts #11--Cavanough, Icon2, Fletcher, Math-Greek, Toyland, Troyes, Memphis, Provo, Scan, Tombstone, Southbend, Klingon, Wall Street.

Clip Art **

M33: Clip Art #1--AirCraft, Business, Car Logos, Cars & Trucks, Clip Art Demo, Disney, Eyeballs, Flowers, Misc, Seasons,Trees1, Trees2, ViewPaint 1.5.

M52: Clip Art #2--Al & Jimmy, Americana, Arrows, Bigger Guys, Billboards, Borders, Cars, Cartoons, Cats, Celebrities, Egret, Famous People, Farm Animals, Good Guys, Gorilla, Hopefuls, Little Guys, MacLectic Clip Art, More Little Guys, Presidents, Rain/Chef, Skier/Football, Skylines, Space/Race, Statues, Tennis/Running, Wine & Beer.

M55: Clip Art #3--Animals, arrows, books, business, calendar, computer, disk, files, geography, holiday, houses, icons1-6, mail, memo, misc1, misc2, money, music, office, people and symbols.

Commercial Demos **

M37: Mac-A-Mug Pro Demo--Ver 1.0, Create your own mug shots by combining a variety of different facial features.

M38: Video Works Player #1--PD player for VW animated screens w/11 movies.

M39: Demo Disk #2--Anatomiser, DeskPaint, and SuperPaint.

M54: Design--No save feature. Includes 5 samples and full documentation.

M59D: Demo Disk #3--Demo version of Kaleidagraph and Geographics II.

M62: Demo Disk #4--Math Blaster and Blob Manager Demo.

Hypercard Disks **

M48D: HyperStacks #1--Address, Databook, Fractal, Funy Day, Home Desk, HyperNews 1.2, HyperZoetropes, MacGallery, MacVermont #2, Notebook, Periodic Table, and ResEdit IPS.

M49D: HyperStacks #2--Ear, Illusions, Passing Notes, Shipstack, Silly, and US States V2. NOTE M48 and M49 require HyperDA using 64K ROM Spectre or Magic Sac.

M56D: HyperStacks #3--Atkinson's 786K Clip Art Stack, with 500 pieces of clip art. Requires HyperDA when using 64K ROM Spectre or Magic Sac.

***** Spectre 128 compatible.***

Spectre 128 PD Library

Note: These disks require Spectre 128 (128K ROMs) and DO NOT work with 64K ROMs unless otherwise noted.

S1: MacWrite 5.0 Demo--(Cannot print/save but can load and read doc files.)

S2: MacPaint 2.0 Demo--(Cannot print or save files.)

S3D: Red Ryder 9.4--Powerful telecommunications program. Docs, utilities included.

S4D: Aldus Freehand Demo--A Videoworks II interactive demo of Freehand.

S5: Games #1--Banzai, Monopoly 4.0, ATC 4.0, Mines, New Daleks, Brickles 4.0

S6D: PowerPoint Demo--(64K ROMs Compatible) Demo version of program for planning, composing, and creating complete presentations (Also works with Magic Sac).

S7: Games #2--Space Bubbles, Stratego, Investigator #1, Towers of Hanoi, Marienbad.

S8: Image Studio Demo--(no save) A photo retouching lab on the desktop, modify digitized images in 65 grey scale levels.

S9: Telecom #1--StuffIt 1.51, StuffIt Users Guide, Freeterm 2.0 w/docs, TermWorks 1.3, Packet III ver 1.3.

S10D: Stacks #1--Concentration, HyperGunshy, Dinosaurs, AutoStack, Home 1.2.

S11: Utilities #1--MacEnvy, Benchmark, DiskTimer II, SampleIt 1.21, SampleIt Docs, Apfont 3.2, HierDA, Fever, OnCue 1.3 DEmo, ScreenDump II, Findsweel 2.0 Demo

S12D: Full Impact Demo--Spreadsheet program. (No save feature.)

S13D: Stacks #2--VisualStack, Chem Flash Cards, DisplayPict 1.4, Indigo Gets Out, AutCat, Animal Stack, Comic, OnTheBeach, Name That Plane.

S14: Utilities #2--Big Das runner, Mac II Icons, DiskParam, Utilities 1.5.1 Guide, Unstuffit DA 1.5.1, Auto Unstuffit Installer 1.5, Repair 1.2, ICON Designer, Viewer 1.5.1, SuperClock 3.1, SuperClock Doc ToMultiFinder, Interferon 3.1.

S15: Games #3--Darts, MacCamelot, BricklesPlus, Gravitation 4.0, Swamplord

S16: DAs #1--NekoDA, BezierDa and Docs, SnapShotDA 1.2, Adventure, VirusDetective, BreakKey, SysErrTableDA, PinUp Clock DA, Freemem, New Scrapbook DA

S17: Sounds #1--SoundMaster w/22 sound files for use w/V1.9 of Spectre.

S18: Graphics #1--1Dmata, DAfx 1.32, 3dEDIT, Fly Saver, Kaleidoscope, Optical, Pattern Blocks, Rae, Turbo View 1.01, MacPaint Shortcuts, Desktop Shortcuts.

S19D: Hyper Utilities #1--Deprotect Stack, XPICT, Moving Cursors Tutorial, Button Manager, Stack Compacter, Field Line Numberer, CardMover, Six Little Goodies, MH PowerScripts Sample, ShowDialog 1.5.

S20D: MacDraw II Demo--VideoWorks format gives tour of latest features.

S21: Utilities #3--File Scan, Jaws Icon, File Master Icon, File Monster Doc, SnapShot Installer, Black Hole 6.0.2, Looney Tunes Icons, Dog Trash Icon, Shredder Icno, UDS/M1.1, Virus RX 1.4a2, System Font. Note: Some icon files require ResEdit.

S22: Sword of Siegfried--Graphics/text adventure (requires v1.9 of Spectre).

S23: Sounds #2--demo of Mac CD 1.0. Sound files may also be used w/SoundMaster on #S17. (10000 Marbles, Any Sound 1, Any Sound 2, Bad Disk 1, BVad Disk 2, Beep, Beep Sound 1, Disk Sounds 1-4, Don't Worry Be Happy, Ka-Chung!, Rolling Your Own, Type Key 1, Type Return 1, Type Space 1.)

S24: Games #4--Dragon 2, Zoony, MazerLazer, and demo version of ShufflePuck.

S25D: MacMoney Demo--Personal finance program, prints but does not save.

S26: Fkeys #1--23 fkeys and fkey related applications (AnalogClock, Clock, CopyDisk 3.0, Craps, F-KEY Installer, FadeKey, FileInfo, fkey, Fkey File Installer, Fkey-DA Sampler 2, FkeyView 2.5, FullMoon Calender, InfoKey, LaunchKey, MacAlmanac, Pipeline, ResC-Viewer 4.5, SafeLaunch 2.2, SpaceWarp, StripTease, Unpack, Ver Reader 3.0 and Windows.

S27: Games #5--3D Checkers V2.0, Ballistics 2.0, Consternation 1.0, HangMan, Peg Puzzle Pak, UnBreakout.

S28: DAtabase Builder Demo--Full featured database (including graphics) in a Desk Accessory.

S29: Sounds #3--Talking Moose 1.21 and 9 sound resources for MacCD (#S23) or SoundMaster (#S17)--Archie, Bad Disk 3, Beep Sound 2, Disk Sound 5, Disk Sound 6, Key Click 1, Oh Yeaaahh!, Mac Sound 1, and Startup Sound 1.

S30: Utilities #4--Init Cdev, Assassin, BundAid, Curse the Finder, Easy Icon, Finder Cursor Icons, Finder Icons, HD Mini-Icon, IconManager 1.1, JerryCan, Murphy Init, NeVR Init, ScrollMBar CDev, System Icons+, Version Sleuth 1.0, What, and Windows.

S31: DAs #2--Address Book 1.1.2 w/docs, Artist+ 2.01 w/docs, BlackJack, Calc 3.0, Calendar 1.7, Catch, dCAD 3.0 w/docs, Diskinfo 1.2, Maxwell 2.2a, MegaCalculator, SuperHelp w/docs, VirusDetective 2.2.1 w/docs, and windows.

New for September

S32: VideoWorks w/Sound--contains 6 VideoWorks animations that also produce sound when played. Comes with a VW player, sound resources, and MacinTalk. Animations are "1 Mac to go," Apollo, Marbles, People Wall, ShortStop, and The Cauldron.

S33D: HyperUtilities #2--13 utilities for use with HyperCard: GetString XFCN, HyperScrap, LockField, PluckString XFCN, Recover, Script Lister, ScriptAccess, Stack Analyzer, Stak-X Demo, Unity, Virus Encyclopedia, XFCN miscellany, Zoomer XCFN).

#S34: Excel Templates #1--20 assorted files for use with Excel: Macro, Amort Sch, Apod 1.9, Budget, Checkbook, Clock.CH, Clock.MS, Clock.WS, Commands, DB.Form, Excel Budget, Expenses, Exps, Inc, IRA, Load Calc Master2, Load MaxTime 2, Matrix, MortAmt.MS 3.0, Replace, Savings Account, Bio Chart, Biorhythm.

S35D: HyperStacks #3--5 new stakcs for use with HyperCard or SuperCard: Atoms, Bird Stack II, Helicopter Stack, HyperIRA, Scan Stack 3.

#S36: Sounds #4--assorted sounds for use with SoundMaster (disk #S17) and a file that changes system beep to other kinds of sounds. Includes A Wish, I don't know, I know you are, Mecca jumbi, Need Input!, Unacceptable, Ax Headroom, CheapBeep, Ayaaaah!, Boom!, aooooh, game over man, monkey, and vulcan mind.

NOTE: CN disks **cost $4.00 each,** but discount prices are available for quantity orders: 10+ disks ($3.80 ea), 20+ ($3.60 ea), 30+ ($3.40 ea), 40+ ($3.20 ea), 50+ ($3.00 ea). Add $1 for every 6 disks (or fraction thereof) for shipping and handling (max $6 charge for S&H).

Order from CN Library, 122 N. Johnson Rd, Sterling, VA 22170.

Current Notes ST Library

I have had to make some revisions in some of the disks announced last month. A number of the disks were obtained from another commercial source of PD disks. Unfortunately, I later discovered that not all of the components on these disks were public domain.

#351, Publishing Partner Fonts, is completely revised and, I think, much better. It includes 18 complete fonts for use with Publishing Partner. Similarly, **#355: IMG Mortised Cuts**, is a completely new disk. I was informed by Migraph that the previous #355 (GEM picture files), was copyright of Digital Research. I saw no copyright on the source disk nor any of the pictures, but nonetheless have withdrawn the disk. We will release another disk of GEM picture files shortly. In the meantime. the replacement contains 19 IMG files I personally scanned in that, I think, desktop publishers will find very useful. See, for example, the dog on this page or the two elves on the next page.

And yet a third problem, **PC #20: Procomm Plus – Test Drive** required approval of Procomm. When I checked, they said that they had withdrawn Procomm Plus – Test Drive, a shareware product, from the bulletin boards and, since they were trying to distribute it through dealers, would like it withdrawn from the PD market. Since there are many other PD telecommunications programs available, we will replace #20 shortly with a suitable alternative.

My apologies for any inconvenience these changes may have caused anyone. I am very anxious to maintain the quality, and integrity of the CN library. You may rest assured that no commercial software will knowingly be put in that library. Also, remember that CN disks are guaranteed. If you should receive a disk that doesn't load or seems bad, simply return it. In some cases, a disk may not be compatible with your system (not enough memory, different TOS, Mega vs 1040, color vs mono, etc.). Whatever the problem, if you are not satisfied, return the disk and we will replace it with the disk of your choice.

ST programmers: if you would like to submit your PD or Shareware programs to the CN library, send them to CN Library, 122 N. Johnson

Rd., Sterling, VA 22170.

#345: Spectrum 512 Pictures. 8 exciting new Spectrum pics from John Berthold: Anasaz1, blokblos, duckneuv, explore, moonfest, outback, philtoo, scape3c and spslide.prg.

#346: Spectrum 512 Utilities. From Doug Johnson: spcprint (print Spectrum pictures directly to printer, color or black-and-white), spcconvr (convert Spectrum 512 pictures to Degas PI1), spcview (GFA Basic program to view Spectrum 512 pictures). Disk includes three pictures: laserbee, madonna, and redarrow.

#347: MOTerm Elite 1.41. The Ultimate Telecom Package for the ST, by Doug Johnson. Features many things that no other terminal-packages contain, including medium or high resolution graphics which can be exchanged over the modem automatically, sound that can be transferred online, a new file transfer protocol callded Dmodem that is faster and more accurate than Xmodem, built in text editor for editing of information captured off of a modem or other files, an automatic dialer that will dial phone numbers while you do something else within the program, the fastest Xmdoem file transfer routines yet available for the ST, and much more. Requires 1 Mb.

#348: Game Disk No. 18. Companion 1, color arcade action as you fly your ROCM, and Trivia Quiz, test your knowledge against the computer or other players. (Color)

#349: XFORMER Programs No. 1. Includes Analog 35, 38, 41, 44. These are the Analog 8-bit disks converted to ST format for use with Xformer. Xformer is the Atari 8-bit emulator. (CN #263: ST XFORMER now has version 2.4)

#350: XFORMER Programs No. 2. Includes Analog 47, 50, and 55. More Analog 8-bit disks converted to ST format for use with Xformer, the Atari 8-bit emulator.

#351: Publishing Partner Utilities No. 3. (REVISED) 18 fonts for use with Publishing Partner: Binner, Blockup, Cyrillic, Futura Bold Condensed, Futura Block, Keyboard, Gothic, Lubalin, Old English, Oriental, Segment, Spokane, Stop, Timebold, Tyme/Helv, University, and Wilkes.

#352: Graphic Utilities. Metaview Prg/Acc by Ric Clayton. Program which allows you to view GEM Metafiles in standard GEM windows. (Metafiles are files with a .GEM extension such as those produced by EasyDraw and GEM-Draw.) WIll display any GEM Metafile, in any resolution, with or without GDOS installed, and (hopefully) run on any version of TOS. Image Editor DA V0.65 Demo by Mike Bergman (mono only), a tool to edit monochrome .IMG files for desktop publishing and related activities. Deluxe Slideshow V2.0, by John Brochu, com bines all the currently popular ST graphics formats (Neochrome, Degas, Degas compressed, Tiny,

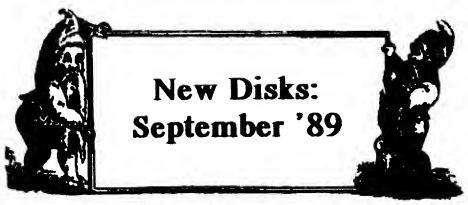
and Spectrum) into one compact, but flexible slide show program. IMG Show, by Migraph, allows viewing of monochrome .IMG files on any resolution ST (low, med, hi, & Viking 1). Art Gallery, by Charles F. Johnson, shows Degas, Degas Elite compressed, Neo and Tny compressed pictures. ST Banner, by Steve Whitney, print large banners out of small letters on your printers. Also Degasnap.prg and Snapshot.acc.

#353: Print Master Icons No. 3. Collect 1,2,3,4. A collection of 479 icons for use with Print Master.

#354: Print Master Icons No. 4. Collect 5,6,7. A collection of 470 more icons for use with Print Master.

#355: IMG Mortised Cuts (REVISED). 19 IMG pictures: angel,artist, backsign, dinner, dog, dragon, elf, frntsign, jackbox, jester, mirror, paperboy, ship1, ship2, train, trunpet, twoelves, umbrella, wideman. See examples at left (dog) and below (two elves).

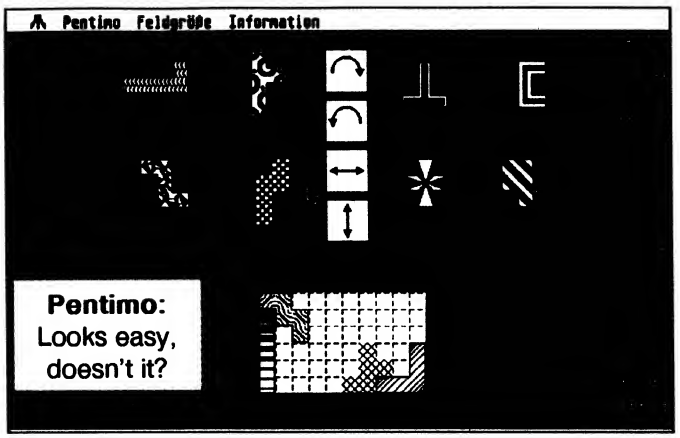
#356: Bolo. The game Bolo is from Germany and runs in color or monochrome. The files on this disk MUST be in drive A. Bolo is a cross between Breakout and Arkanoid. This is a GREAT arcade type game.



#357: PageStream Fonts No. 1. An assortment of DEMO fonts available for PageStream. Note: these demos do not include the entire alphabet. Anglo, Opt, Typewriter, Downtown, Handwriting, Rock, Beginnings, Brushup, Karin ... +24 more fonts.

#358: Calamus Fonts No. 1. 15 complete fonts for Calamus. Includes Cursive, Condensed Cursive, Gillia, Revue, Spokane plus 10 more.

#359: Pentimo. This is a terrific puzzle game that will provide you with hours of entertainment. Place 12 pieces in box. Many variations, 100s of solutions, but try and find one! MONO only.



#360: Bermuda Race II. A racing simulation game. You have to learn the ins and outs of sailing to win this race. COLOR or MONO.

#361: Game Disk No. 19. Two arcade clones: Rocket Patrol (like Missile Command) and Trifide (like Galaxian). COLOR only.

#362: A Dudley Dilemma. An AGT Adventure, by Lane Barrow. In this game, you play the role of a Harvard University student living in Dudley House in his/her quest for knowledge, adventure and a diploma. This award winning game is a very clever, humorous and challenging adventure in the classic style of Infocom. COLOR or MONO.

#363: Tark, Priestess of the first church, in her battle against the demon of dark desire, an AGT adventure by Philip Kegelmeyer. An extremely well written game based on a "Dungeons and Dragons" theme (complete with spells and hit points) where you play a priestess struggling against the forces of evil. COLOR or MONO.

#364: Rapture and Susan(R). Two more AGT adventures: Love's Fiery Rapture, by Natasha Mirage. A torrid tale of what could turn out to be THE perfect date. A parody (???) of romance novels like those published by Harlequin. This game demonstrates a very clever way to translate a "Choose Your Own Adventure" style game into an AGT game. Susan, A Lustful Game, By Bill Larkins. You attempt to score points with your girlfriend, Susan. An R-rated game for adults only. COLOR or MONO.

#365: Ring & Pork. Two more AGT adventures: Des Ring Des-Nibelungen, by Michael R. Harris. You play the role of Siegfried in an adventure based on the operas of Richard Wagner--complete with a very tender and loving Brunnhilde. A very unusual approach to an adventure game. PORK, by David Malmberg. A parody of the Infocom game of ZORK. If you were ever frustrated by ZORK, playing this game is your chance to enjoy the sweet fruits of revenge. COLOR or MONO.

#366: The Adventure Game Toolkit (AGT). This is a shareware product that lets you construct your own adventure games. Complete Docs included. Adventure games above are all compiled versions of games created with AGT. Programs on disk are ARC'd. COLOR or MONO.

#367: AGT Source Code. Includes (ARC'd) the source code to 9 additional AGT adventures: Colossal Cave Adventure, Crusade, Elf's Adventure, A Fable, Ghost Town, Paranoia, Odieu's Quest, The Squynchia Adventure, An Underground Adventure.

#368D: VIDI-ST No. 1. A VIDI-ST digitized animation, two animation sequences of a dunk shot and a pitch. Requires 1Mb and COLOR.

#369D: VIDI-ST No. 2. A VIDI-ST digitized animation, hand over mouth digitized animation sequences.

♦ ♦ ♦ ♦ ♦

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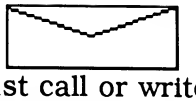

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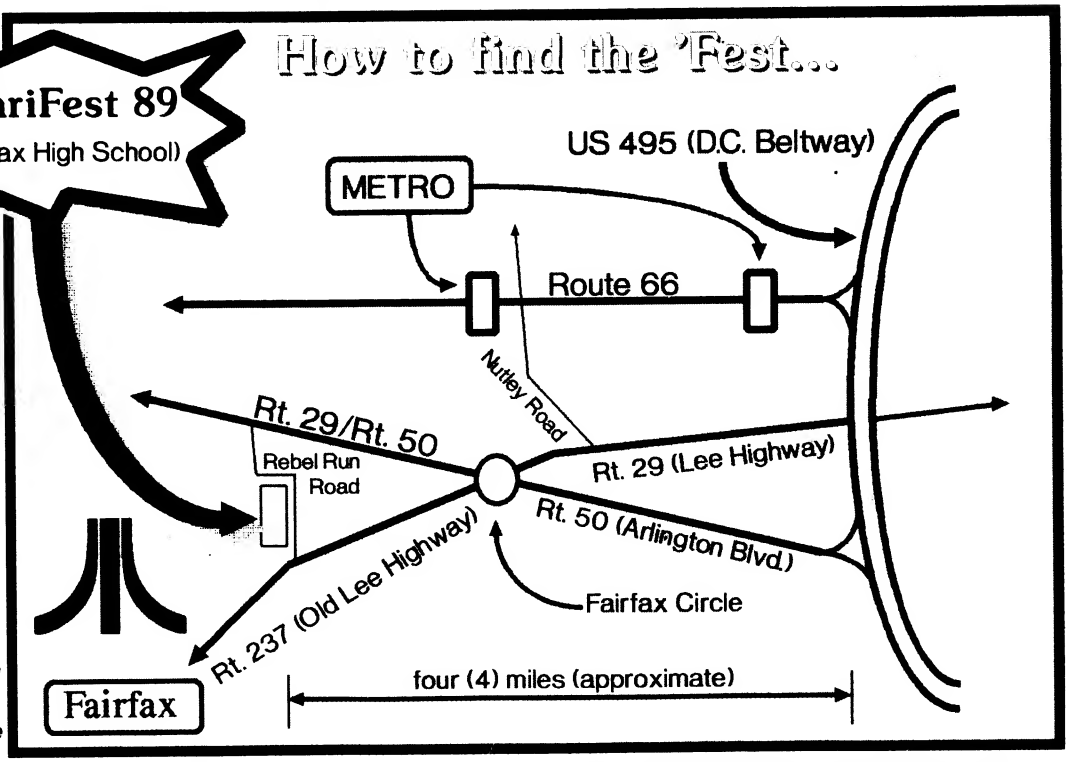

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